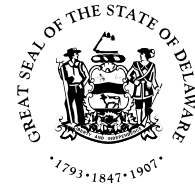
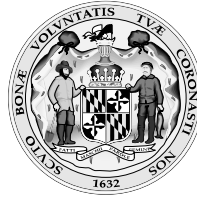
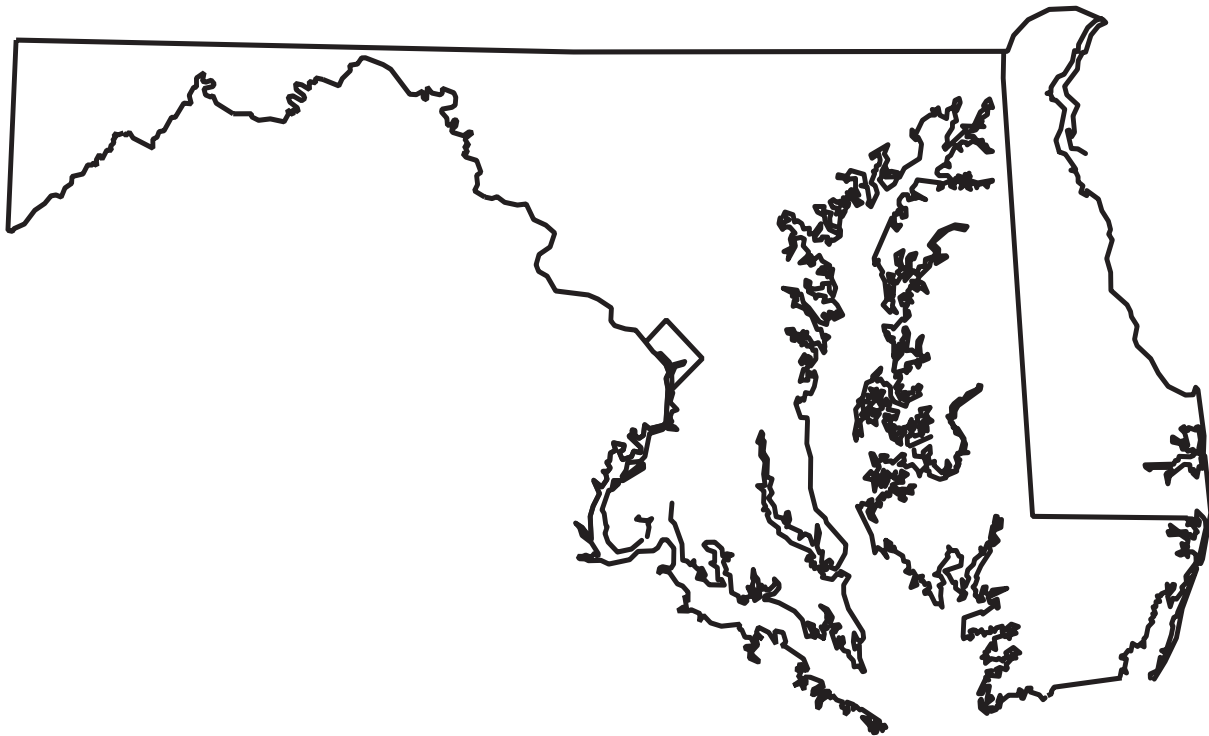


Prepared in cooperation with the
States of Maryland and Delaware,
Washington, D.C. and with other agencies



Water Resources Data Maryland, Delaware, and Washington, D.C. Water Year 2004

Volume 2
Ground-Water Data



Water-Data Report MD-DE-DC-04-2

Calendar for Water Year 2004

2003

October							November							December						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4							1		1	2	3	4	5	6
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31			
							30													

2004

January							February							March						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7		1	2	3	4	5	6
4	5	6	7	8	9	10	8	9	10	11	12	13	14	7	8	9	10	11	12	13
11	12	13	14	15	16	17	15	16	17	18	19	20	21	14	15	16	17	18	19	20
18	19	20	21	22	23	24	22	23	24	25	26	27	28	21	22	23	24	25	26	27
25	26	27	28	29	30	31	29							28	29	30	31			

April							May							June						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3							1			1	2	3	4	5
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11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			
							30	31												

July							August							September						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7				1	2	3	4
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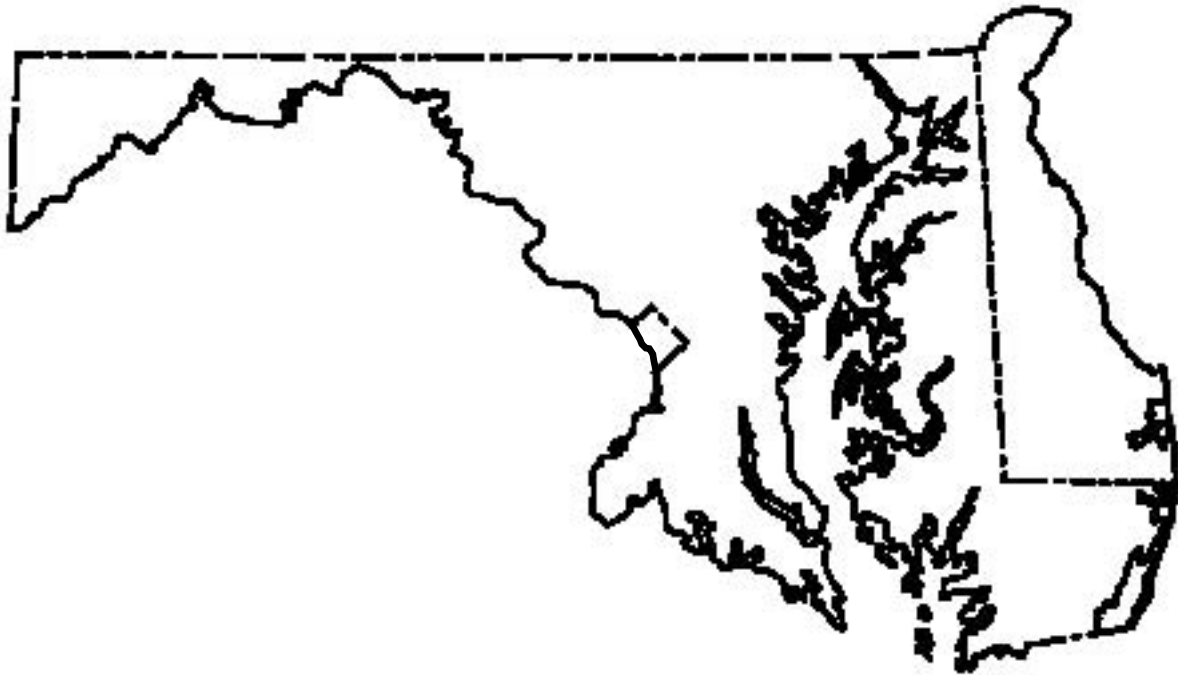
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Water Resources Data Maryland, Delaware, and Washington, D.C. Water Year 2004

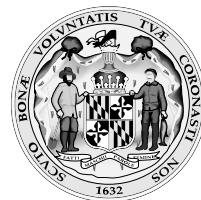
Volume 2. Ground-Water Data

By Stephen E. Curtin, Anita L. Anderson, and Richard W. Saffer

Water-Data Report MD-DE-DC-04-2



Prepared in cooperation with
the States of Maryland, Delaware, Washington, D.C.
and with other agencies



U.S. Department of the Interior

Gale A. Norton, Secretary

U.S. Geological Survey

Charles G. Groat, Director

2005

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Baltimore, MD 21237
410-238-4200

Information about the USGS, MD-DE-DC Water Science Center is available on the Internet at <http://md.water.usgs.gov/usgs/>

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PREFENCE

This volume of the annual hydrologic data report for Maryland, Delaware, and Washington, D.C. is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These streamflow, ground-water-level, and water-quality records provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Maryland, Delaware, and Washington, D.C. are contained in two volumes:

Volume 1. Surface-Water Data

Volume 2. Ground-Water Data

This report (Volume 2) is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey, Maryland Geological Survey (MGS), and Delaware Geological Survey (DGS), who collected, compiled, analyzed, verified, and organized the data, and who reviewed, typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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Earl A. Greene and Valerie M. Gaine provided technical and editorial reviews for the Introduction section of this report. Judith C. Wheeler, provided invaluable assistance and editing support for this volume. Andrew E. LaMotte produced figures 6 through 8, using a Geographic Information System mapping program.

This report was prepared under the general supervision of James M. Gerhart, Director, MD-DE-DC Water Science Center, and Catherine L. Hill, Regional Hydrologist, Northeast Region, and in cooperation with the States of Maryland and Delaware, Washington, D.C., and other agencies.

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GROUND-WATER SPRING DISCHARGE

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GROUND-WATER LEVELS

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Well 384436075234801 Local number Of12-09..... 62

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Well 384258075063101	Local number Oi24-06	112
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Well 382215075041903	Local number WO Bh	89.....	515-516
Well 382127075043803	Local number WO Bh	97.....	517
Well 382127075043802	Local number WO Bh	98.....	518
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Well 383811075113001	Local well number	Ph24-01.....	545-558
Well 383840075112001	Local well number	Ph24-02.....	545-558
Well 383803075105301	Local well number	Ph25-17.....	545-558
Well 383706075115901	Local well number	Ph34-18.....	545-558
Well 383744075110701	Local well number	Ph34-22.....	545-558
Well 383738075112301	Local well number	Ph34-23.....	545-558
Well 383738075112201	Local well number	Ph34-24.....	545-558
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Well 383729075101601	Local well number	Ph35-25.....	545-558
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Well 383729075101603	Local well number	Ph35-30.....	545-558
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Well 383729075101605	Local well number	Ph35-32.....	545-558
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Well 383748075093001	Local well number	Pi31-12.....	559-572
Well 383740075093303	Local well number	Pi31-13.....	559-572
Well 383739075093103	Local well number	Pi31-16.....	559-572
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Well 391032076385904	Local well number	AA Ad 102.....	573-578
Well 390844076430701	Local well number	AA Bc 252.....	573-578
Well 390915076381401	Local well number	AA Bd 126.....	573-578

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BALTIMORE COUNTY

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CARROLL COUNTY

Well 393338076593501	Local well number	CL Bd 179.....	589-591
Well 393338076593502	Local well number	CL Bd 179-Finished water.....	589-591
Well 393641077002801	Local well number	CL Bd 180.....	589-591
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CECIL COUNTY

Well 393240075572301	Local well number	CE Cd 89.....	592-597
Well 392544075574803	Local well number	CE Dd 102.....	592-597

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Well 392545077303201	Local well number	FR Dc 62.....	598-604
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Well 392157077314401	Local well number	FR Ec 43.....	598-604
Well 392157077314402	Local well number	FR Ec 43-Finished water.....	598-604
Well 392314077151301	Local well number	FR Ef 54.....	598-604
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Well 391702076003403	Local well number	KE Bd 167	610-630
Well 391702076003404	Local well number	KE Bd 168	610-630
Well 391659076001701	Local well number	KE Bd 171	610-630
Well 391659076001702	Local well number	KE Bd 172	610-630
Well 391659076001703	Local well number	KE Bd 173	610-630
Well 391700076002401	Local well number	KE Bd 174	610-630
Well 391700076002402	Local well number	KE Bd 175	631-651
Well 391700076002403	Local well number	KE Bd 176	631-651
Well 391702076003301	Local well number	KE Bd 177	631-651
Well 391702076003302	Local well number	KE Bd 178	631-651
Well 391702076003303	Local well number	KE Bd 179	631-651
Well 391820075580201	Local well number	KE Be 189	631-651
Well 391717075571001	Local well number	KE Be 194	631-651
Well 391717075571002	Local well number	KE Be 195	652-662
Well 391849075561601	Local well number	KE Be 207	652-662
Well 391710075584001	Local well number	KE Be 218	652-662
Well 391710075584002	Local well number	KE Be 219	652-662

MONTGOMERY COUNTY

Well 385620077064201	Local well name	Potomac River Near Great Falls-Finished water	663-667
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PRINCE GEORGES COUNTY

Well 390157076454101	Local well number	PG Be 37	668-675
Well 390248076492801	Local well number	PG Be 38	668-675
Well 385723076593401	Local well number	PG Cc 31	668-675
Well 385130076465501	Local well number	PG De 21	668-675

QUEEN ANNES COUNTY

Well 390850075533201	Local well number	QA Cg 67	676-683
Well 390055076184501	Local well number	QA Db 14	676-683
Well 390022076191801	Local well number	QA Db 15	676-683
Well 390059076191801	Local well number	QA Db 17	676-683
Well 390033076184501	Local well number	QA Db 23	676-683
Well 390117076191301	Local well number	QA Db 27	676-683
Well 390201076182701	Local well number	QA Db 30	676-683
Well 390201076182703	Local well number	QA Db 32	676-683
Well 390023076174301	Local well number	QA Db 34	676-683
Well 390119076191001	Local well number	QA Db 35	676-683
Well 390023076174302	Local well number	QA Db 37	676-683
Well 385825076202901	Local well number	QA Ea 39	676-683
Well 385820076202501	Local well number	QA Ea 42	676-683
Well 385554076213801	Local well number	QA Ea 45	676-683
Well 385825076201201	Local well number	QA Ea 48	676-683
Well 385505076215001	Local well number	QA Ea 59	676-683
Well 385701076212501	Local well number	QA Ea 60	676-683
Well 385812076202801	Local well number	QA Ea 61	676-683
Well 385718076211501	Local well number	QA Ea 77	676-683
Well 385718076211502	Local well number	QA Ea 78	676-683
Well 385757076200101	Local well number	QA Ea 79	676-683
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Well 385705076212002	Local well number	QA Ea 82	676-683
Well 385847076184801	Local well number	QA Eb 144	676-683
Well 385852076195201	Local well number	QA Eb 156	676-683
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Well 385354076212701	Local well number	QA Fa 49	676-683
Well 385024076222501	Local well number	QA Fa 54	676-683
Well 385133076201201	Local well number	QA Fa 58	676-683
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Well 385434076215601	Local well number	QA Fa 63	676-683
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Well 385236076215201	Local well number	QA Fa 66	676-683
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Well 382638075033001	Local well number	WO Ah	38	685-686
Well 382443075033501	Local well number	WO Bh	34	685-686
Well 382215075041901	Local well number	WO Bh	84	.....	685-686
Well 382215075041902	Local well number	WO Bh	85	.....	685-686
Well 382215075041903	Local well number	WO Bh	89	.....	685-686
Well 382127075043802	Local well number	WO Bh	98	.....	685-686
Well 382127075043804	Local well number	WO Bh	101	.....	685-686
Well 381938075052001	Local well number	WO Cg	33	.....	685-686
Well 381953075051401	Local well number	WO Cg	87	.....	685-686



Photo by C.J. Strain

Well FR Df 35 Lake Linganore

WATER RESOURCES DATA - MARYLAND, DELAWARE, AND WASHINGTON, D.C., WATER YEAR 2004

VOLUME 2. GROUND-WATER DATA

INTRODUCTION

The Water Resources Discipline of the U.S. Geological Survey, in cooperation with State and local agencies, obtains a large amount of data pertaining to the water resources of Maryland, Delaware, and Washington, D.C. each water year. These data, accumulated during many water years, constitute a valuable data base that can be used to develop an improved understanding of the water resources of the States and Washington, D.C. To make these data readily available to interested parties outside the U.S. Geological Survey, the data are published annually in the report series entitled "**Water Resources Data - Maryland, Delaware, and Washington, D.C.**"

This series of Water Resources Data reports for Maryland, Delaware, and Washington, D.C. began with the 1961 water year report that only contained data relating to the quantity of surface water. For the 1964 water year, a similar report was published, and it contained data relating to surface water, and ground-water quality. Beginning with the 1975 water year, the report was changed to its present format, with one volume, containing data on surface-water quantity, surface- and ground-water quality, and ground-water levels. For the 1989 water year, the report format was changed to two volumes. Both volumes contained data on quantities of surface water, surface-water and ground-water quality, and ground-water levels. Volume 1 contained data on the Atlantic Slope Basins (Delaware River through Patuxent River Basins) and Volume 2 contained data on the Monongahela and Potomac River Basins. Since the 1991 water year, Volume 1 has contained data on the quantity of surface water and surface-water quality, and Volume 2 has contained ground-water levels and ground-water quality data.

This report is Volume 2 of the Water Resources Data report series, water year 2004 and includes records of water levels and water quality of ground-water wells and springs. It contains discharge data records for 4 springs, water levels at 455 observation wells, and water-quality analyses for 119 wells. The locations of ground-water level wells are shown in figures 6 and 7. The locations of ground-water quality sites are shown in figure 8. These data represent the part of the National Water Data System collected by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Maryland, Delaware, and Washington, D.C.

Prior to the introduction of this series and for several water years concurrent with it, water resources data for Maryland, Delaware, and Washington, D.C. were published in U.S. Geological Survey Water-Supply Papers. Data on water levels for the 1935 through 1974 water years were published under the title "**Ground-Water Levels in the United States.**" These Water-Supply Papers may be found in the libraries of the principal cities of the United States and may be purchased from the U.S. Geological Survey Branch of Information Services, Box 25286, Federal Center, Denver, CO 80225.

Water Resources Data reports are published annually by the U.S. Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "**U.S. Geological Survey Water Resources Data Report MD-DE-DC-04-2.**" For archiving and general distribution, the reports for the 1971-74 water years also are identified as Water Resources Data reports. These Water Resources Data reports are for sale in paper copy or on microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices for ordering specific reports, may be obtained from the Water Science Center Director at the address given on the bottom of the title page or by telephone at (410)238-4200.

COOPERATION

The U.S. Geological Survey and Maryland State agencies have had cooperative agreements for the collection of water-resource records from 1896 to 1909 and since 1924. Similar cooperative agreements have existed between the Survey and Delaware State agencies since 1943. Organizations that assisted with funding or services for the preparation of this report through cooperative agreements with the U.S. Geological Survey or through the Maryland Geological Survey and Delaware Geological Survey are:

Maryland Geological Survey, Emery T. Cleaves, Director

Delaware Geological Survey, John H. Talley, Director and State Geologist

Delaware Department of Transportation, Nathan Hayward III, Secretary

Delaware Department of Natural Resources and Environmental Control, John A. Hughes, Secretary of Natural Resources and Environmental Control

District of Columbia Department of Health, Environmental Health Administration, Bureau of Environmental Quality, Water Quality Division

Maryland Department of the Environment, Kendl Philbrick, Secretary

Maryland Department of Natural Resources, Power Plant Assessment Program, Peter Dunbar, Director

Anne Arundel County Department of Public Works, Water Operations, Matthew Mirenzi, Regional Manager

Anne Arundel County Land Use and Environmental Office, Betty Dixon, Land Use Officer

Maryland-National Capital Park and Planning Commission, Nazin Baig, Environmental Planning Coordinator

Calvert County Department of Public Works, Dan Williams, Bureau Chief

Charles County Department of Planning and Growth Management, Roy E. Hancock, Director

Interstate Commission on the Potomac River Basin, Joseph Hoffman, Executive Director

Town of Ocean City, Maryland Water Department, Ronald Ellis, Superintendent

U.S. Environmental Protection Agency, National Risk Management Laboratory, Subsurface Protection and Remediation Division, Stephen G. Schmelling, Acting Director

Organizations and projects that provided data included in this report are acknowledged in the Site Instrumentation and Remarks description in the Ground-Water Levels section.

SUMMARY OF GROUND-WATER HYDROLOGIC CONDITIONS

This report presents spring discharges, well water levels and water-quality analyses from ground-water studies in Maryland, Delaware, and Washington, D.C. The following ground-water hydrologic summary for the 2004 water year includes data collected from the Maryland, Delaware, and Washington, D.C. cooperative water-level monitoring networks.

Ground-water use in Maryland and Delaware continues to increase with population growth, especially with more people living in rural areas. Growth areas in Southern Maryland, and the northern parts of the Delmarva Peninsula of both Maryland and Delaware are causing water users to withdraw ground water from deeper aquifers. As ground-water users' demands increase, water-level data can provide critical information on how to properly evaluate, plan, and manage this natural resource. Water-table monitoring wells can alert users during periods of drought and the information they provide can assist with implementing water-use conservation measures. Confined aquifers, mostly used in the Coastal Plain, provide large quantities of water for municipalities, industry, irrigation, and individual dwellings. Water-level monitoring wells provide the means to track ground-water withdrawal effects on Coastal Plain aquifers, and data on how best to manage water use.

The 2004 water year had higher than normal precipitation across Maryland, Delaware, and Washington, D.C., similar to the previous water year. Precipitation totals reported by the National Oceanic and Atmospheric Administration (NOAA) ranged from approximately 52 inches in Maryland to about 50 inches in Delaware. The average annual precipitation in the Maryland, Delaware, and Washington, D.C. area as observed by NOAA from 1903 through 2003 is about 43 inches. Monitoring water levels in water-table observation wells gives an overview of how ground-water levels responded to precipitation across the region during the 2004 water year. Monthly water-levels at six key water-table observation wells are shown in figure 1. These graphs show the long-term average, minimum, maximum, and 2004 water year monthly water-level observations.

In general, during the 2004 water year monthly water levels were at or above the long-term average (fig. 1). Generally the monthly water levels started out above the long-term average in late fall or early winter. Normal or slightly above normal precipitation caused water levels to stay near the long-term levels in these key observation wells.

In Southern Maryland and the northern area of the Delmarva Peninsula, where the confined Coastal Plain aquifers are the main source for municipal water supplies, long-term water levels continued to decline as shown in observation well CA Gd 6 (fig. 2). Additional ground-water withdrawal from irrigation wells may increase the drawdown of water-levels on the Delmarva Peninsula.

Ground-Water Levels and Spring Discharge

The Maryland, Delaware, and Washington, D.C. area is divided into several physiographic provinces that control ground-water movement through geologic processes related to geomorphology, lithology, and structure. Depending on the amount of ground-water movement through fracture and joint systems and sediments, wells can supply small individual households or larger water users, such as communities, towns, industry, and agriculture. Moving from west to east, the five physiographic provinces in the region are the Appalachian Plateau, the Valley and Ridge, the Blue Ridge, the Piedmont, and the Coastal Plain. Ground-water level conditions for water year 2004 are summarized below by physiographic province.

Appalachian Plateau. -- Ground-water level trends closely paralleled precipitation events in the water-table well GA Eb 78, in Garrett County, Maryland (fig. 1). The ground-water levels in this well for the 2004 water year started just above average and fell to below average in January. Due to spring recharge, water levels rose to a high in March that was above average levels. The water levels then dropped to about average values until August and September, when higher than normal precipitation caused water levels to rise above average levels.

Valley and Ridge. -- Water-table levels were slightly above average throughout the 2004 water year in Collection of Basic Records (CBR) well WA Be 2 (figs. 1 and 3). Other wells in Washington County, WA Bk 25 and WA Ch 106, showed a similar pattern with higher water levels during late winter to early summer. Spring WA Di 103 showed a fairly constant flow throughout the 2004 water year, except for a low flow in August.

Blue Ridge. -- The water levels as recorded by water-table well FR Bd 96 showed water levels were high at the start of the water year and decreased during late summer (July to September). Spring FR Fb 12 showed an increase in flow during April with discharge decreasing during the summer. This spring responded with an increase in discharge due to heavy rain events in September.

Piedmont. -- Water-table levels in the Piedmont Physiographic Province started the 2004 water year above the long-term average. By the end of the water year, water levels were at or slightly above the long-term average. Well MO Eh 20 (fig. 1) reflects the general trend in water levels during the water year 2004. Well CL Bf 1 in Hampstead, Maryland started the water year at a high in October and fell during late summer.

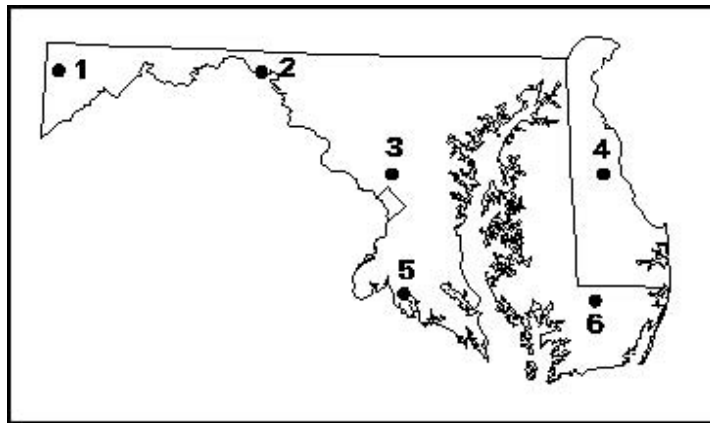
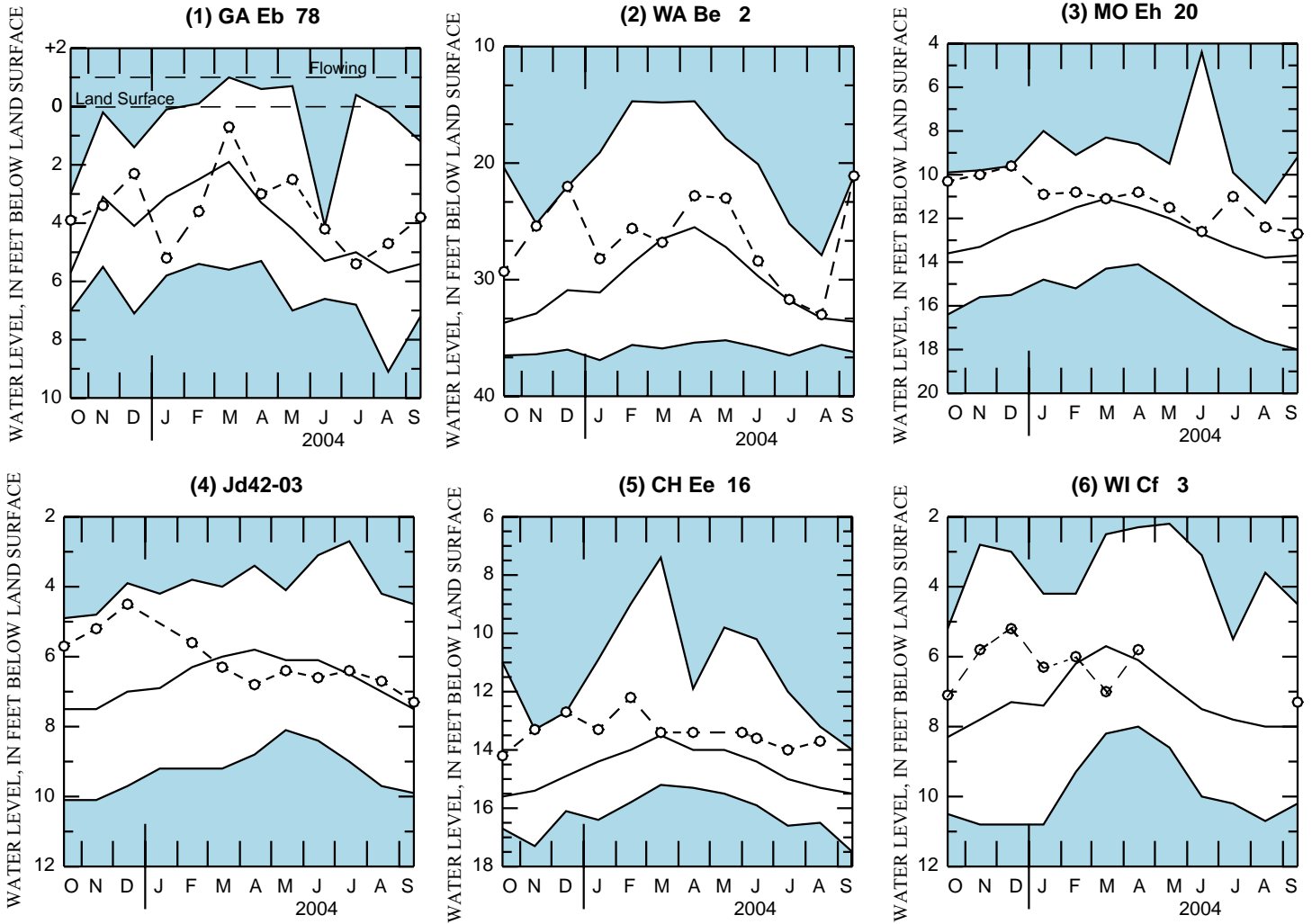
Triassic - Culpeper Basin. -- Monitoring wells in the Triassic Basin include four wells in the Culpeper Basin in northwestern Montgomery County, Maryland. These wells are in confined aquifers that yield large volumes of water and are used as municipal sources. Water levels in the Dickerson well (MO Cb 26) were above land surface for the entire 2004 water year.

Coastal Plain. -- Water levels in water-table monitoring wells (Jd 42-03, CH Ee 16, and WI Cf 3) were about average to slightly higher than average throughout the 2004 water year (fig. 1). Water-table levels on the western shore of the Chesapeake Bay were average to slightly above average during the water year. On the Eastern Shore of Maryland, water levels were similar to those on the Western Shore.

Confined aquifers on the western shore of the Chesapeake Bay lie close to their surface-recharge zones in the area near the contact with the Piedmont Physiographic Province. These aquifers receive most of their ground-water recharge from this outcrop belt. This area is heavily populated because of its close proximity to the Baltimore-Washington and Annapolis metropolitan areas. These areas rely exclusively on ground-water supplies, except for the Greater Baltimore area, which is supplied by surface-water reservoirs, and the northwestern part of Prince Georges County, where the Washington Suburban Sanitary Commission supplies surface water from the Potomac and Patuxent Rivers. Water-level monitoring wells in Anne Arundel County, Maryland recorded continued ground-water level declines in the Patuxent aquifer throughout the County. Ground-water level declines continue to occur in the Magothy aquifer near Annapolis, and the Aquia aquifer in southern Anne Arundel County. Water levels in the Aquia aquifer in Calvert County continue to decline (CA Db 47) with Aquia monitoring well Ca Gd 6 (fig. 2) slightly recovering during the water year. The Magothy, Upper Patapsco, and Lower Patapsco ground-water levels declined in the southeastern part of Prince Georges County. In St. Marys County, Maryland, water-level declines continue in the Piney Point, Aquia, and Upper Patapsco aquifers.

Water Quality -- Saltwater Intrusion Monitoring Projects

Kent Island Ground-Water Monitoring Project. -- This project is a continuation of ground-water level and chloride monitoring that was started in 1983, to observe chloride changes through ground-water use in the Aquia aquifer on Kent Island, Queen Annes County, Maryland due to saltwater intrusion from Chesapeake Bay. A total of 17 Aquia aquifer monitoring wells are currently in operation along with monitoring wells in the deeper confining aquifers. Chloride and bromide water-quality analyses are collected yearly from the water-level monitoring wells and approximately 25 domestic wells. Chloride and water-level monitoring may help Water Resource Managers to be more effective in managing this natural resource.



EXPLANATION

Unshaded areas show range between highest and lowest month-end water levels of record.

- 2004 Water Year
- Average

Figure 1.--Monthly ground-water levels at key observation wells.

Ocean City Ground-Water Monitoring Project.--Saltwater intrusion in ground-water supplies for Ocean City is a water-quality concern. Ocean City is a major Atlantic Coast summer beach resort where the population can increase to over 300,000 during the summer months, in contrast to the 10,000 permanent residents year round. Ocean City exclusively dominates the southern part of the barrier island of Fenwick Island in Maryland. The main water-producing aquifers in this region are the Ocean City and Manokin aquifers, with the Pocomoke aquifer limited to individual domestic wells mostly on the mainland. There are 24 water-level monitoring wells, including 6 that are equipped with digital water-level recorders. Chloride and bromide samples are collected at the end of the summer tourist season so that the highest possible concentrations from six monitoring wells and six water-supply wells can be evaluated. The saltwater/freshwater interface is expected to have migrated its farthest distance east due to the increased summer ground-water use.

SPECIAL NETWORKS AND PROGRAMS

The ground-water Collection of Basic Records (CBR) wells include the National **Climatic Response Network (CRN)** provides a framework for collecting and disseminating ground-water level data characterizing climatic variability. The network fills a unique National need and can be used for local, regional, and National investigations of ground-water response to droughts and other climatic effects. The five Maryland and Delaware CBR water-table observation wells period-of-record hydrographs are shown in figure 3.

The **National Water-Quality Assessment (NAWQA) Program** of the U.S. Geological Survey is a long-term program designed to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in more than 50 river basins and aquifer systems that represent a wide range of environmental settings nationwide and account for a large percentage of the Nation's water use. A wide array of chemical constituents are being measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision-making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and National interest.

The NAWQA programs in the Maryland, Delaware, and Washington, D.C. Water Science Center consist of the Potomac River Basin and Delmarva Peninsula study units of the U.S. Geological Survey National Water-Quality Assessment (NAWQA) program. These two programs were combined into a single project, the Potomac-Delmarva Peninsula (PODL) study in 2001. The NAWQA program emphasizes an understanding of the processes governing water quality, trends in water quality, and the relation of these trends to ecological conditions. The goals will be achieved through integrated assessments of hydrology, geology, and biology. The new project began in 2001 and will complete its current cycle in 2007. During the study period, and afterwards, specific surface-water and ground-water sites will be monitored continuously for analysis of water-quality trends.

EXPLANATION OF THE RECORDS

The ground-water levels and quality-of-ground-water records published in this report are for the 2004 water year that began October 1, 2003 and ended September 30, 2004. A calendar of the water year is provided on the inside of the front cover. The records contain ground-water-level data and water-quality data for ground-water. The locations of the ground-water sites where the data were collected are shown in figures 6, 7, and 8. The following sections of text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each well in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given well or spring and to no other. The number usually is assigned when a well is first established and is retained for that well or spring indefinitely. The system used by the U.S. Geological Survey to assign identification numbers for ground-water well sites is based on geographic location. The "latitude-longitude" system is used for wells.

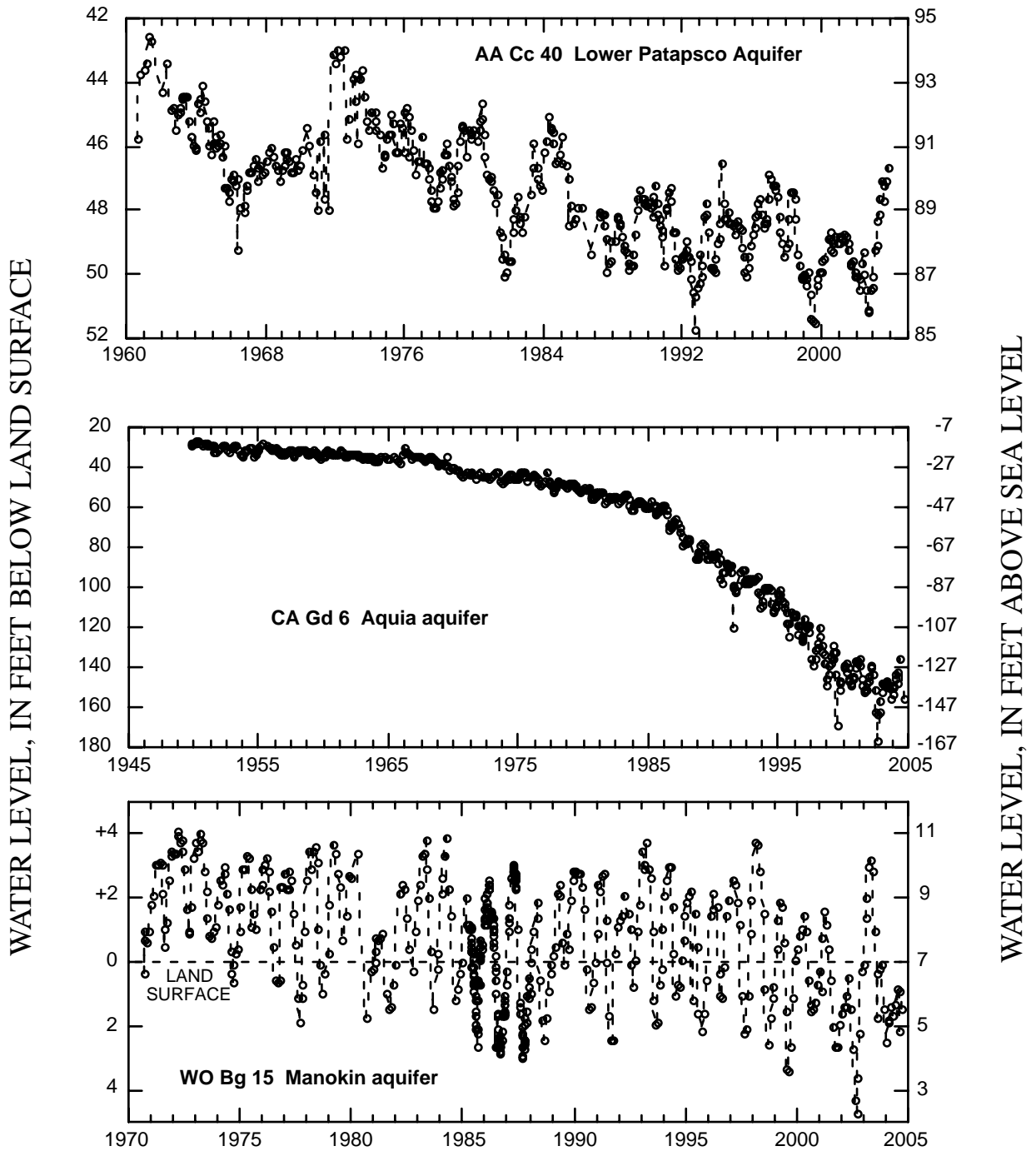
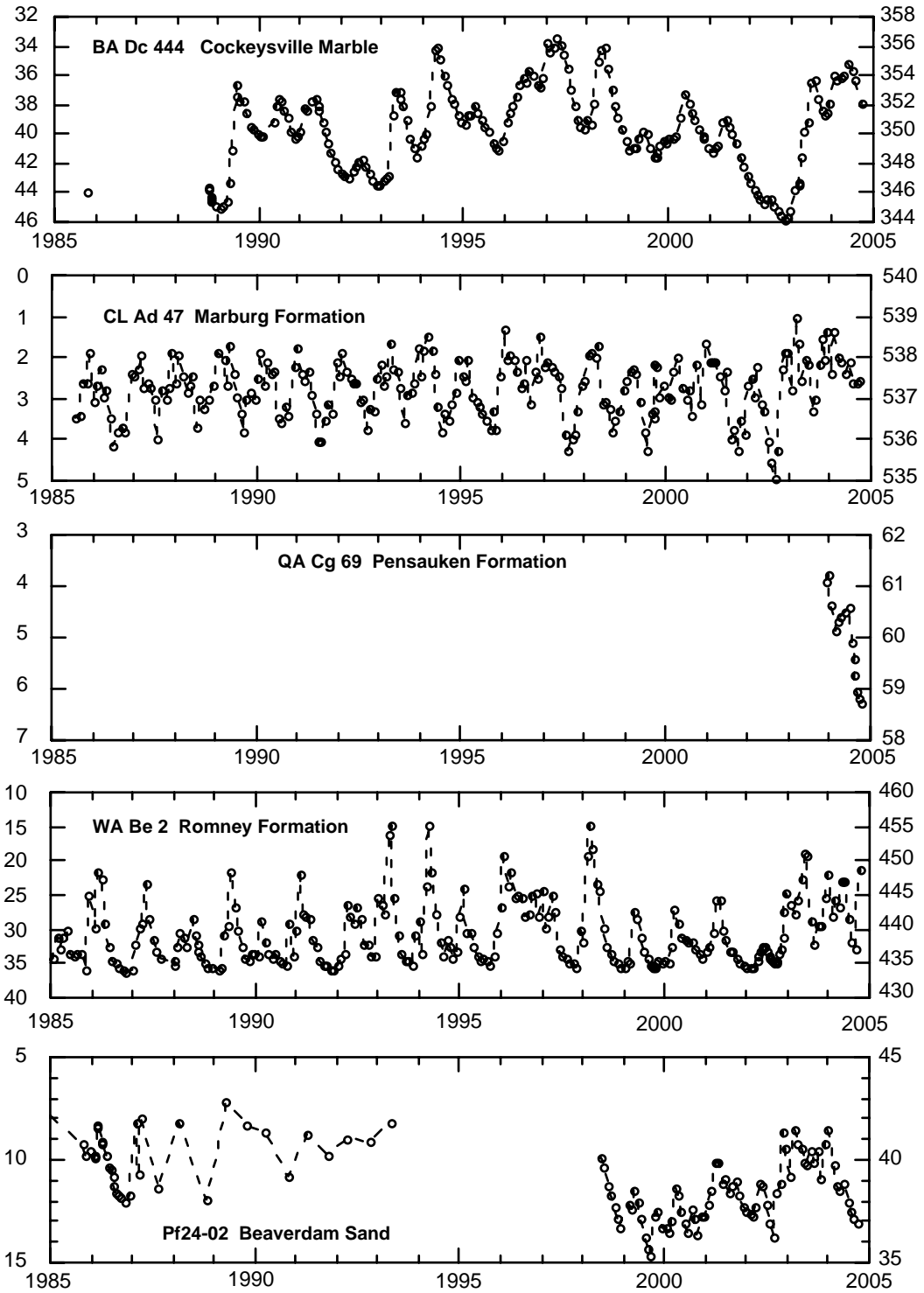


Figure 2. --Ground-water levels in selected observation wells in confined Coastal Plain aquifers in Maryland.

WATER LEVEL, IN FEET BELOW LAND SURFACE



WATER LEVEL, IN FEET ABOVE SEA LEVEL

Figure 3. --Ground-water levels for Collection of Basic Records (CBR) network wells in Maryland and Delaware.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells (or springs) or other sites within a 1-second grid. This site-identification number, once assigned, is a unique number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the **LOCATION** paragraph of the station description as the correct latitude and longitude coordinates. (See fig. 4 below.)

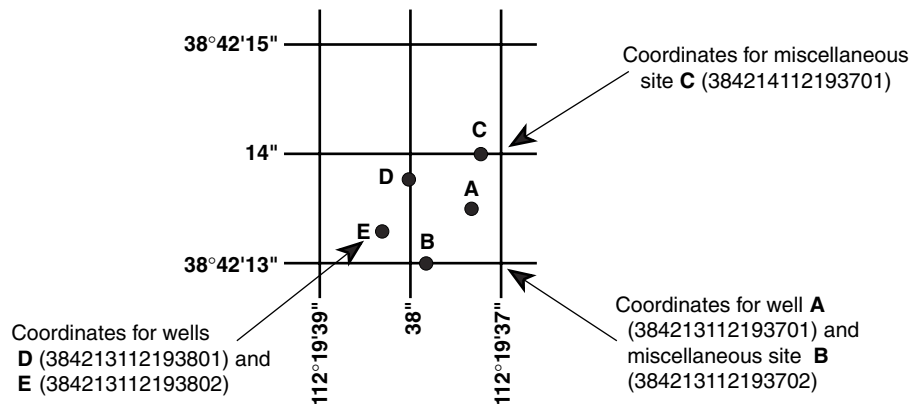


Figure 8. System for numbering wells and miscellaneous sites (latitude and longitude).

Well-Numbering System

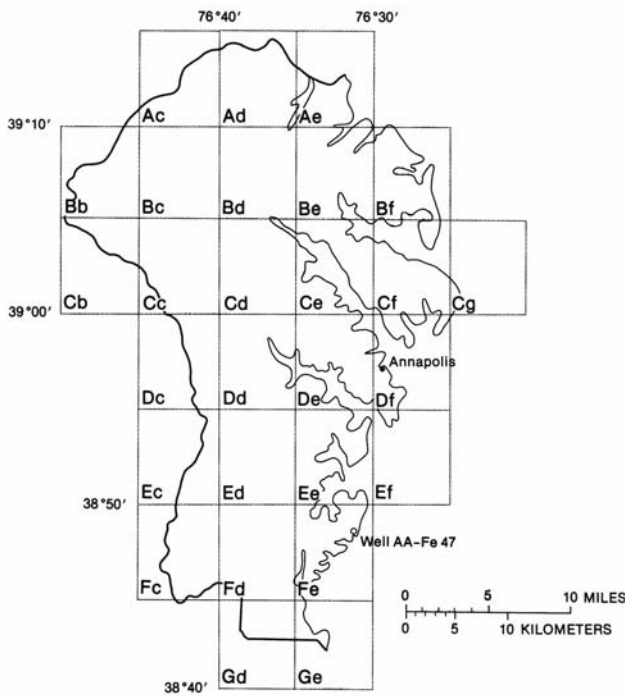
Maryland

Wells in Maryland are also identified on the basis of a second numbering system established by the Maryland Geological Survey. The first two letters of the well number are the county prefix (for example, AL for Allegany). The second part of the well number consists of two letters that designate a 5-minute quadrangle within the county; the first letter (a capital letter) denotes a 5-minute segment of latitude from north to south, and the second letter (lower case) denotes a 5-minute segment of longitude from west to east. The wells are numbered sequentially within each 5-minute quadrangle. For example, well AL Ah 1 is the first well inventoried within the Ah 5-minute quadrangle in Allegany County. Baltimore City well numbers are based on 1-mile grids, with reference to the Washington Monument as the center. Thus, well 7S4E-1 is in the grid cell 7 miles south and 4 miles east of the Washington Monument, and is the first well inventoried in that grid cell.

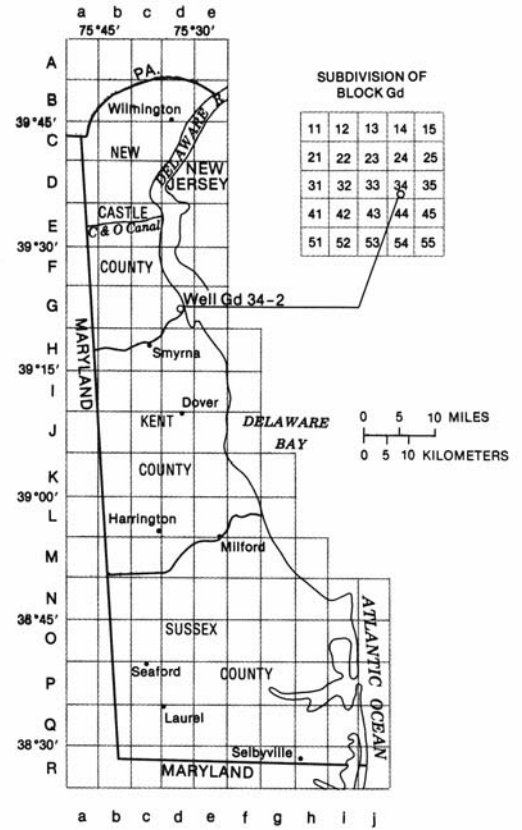
Delaware

Delaware wells are identified by a numbering system instituted by the Delaware Geological Survey. The State is divided into 5-minute quadrangles of latitude and longitude. The quadrangles are lettered north to south with capital letters and west to east with lower case letters. Each 5-minute quadrangle is further divided into 25 1-minute blocks, which are numbered in sequence from north to south (fig. 5). The identity of a well is established by prefixing the sequence number with an upper and lower case letter followed by two numbers to designate the 5-minute and 1-minute blocks, respectively, in which the well is located. For example, well number Cb41-03 is the third well to be inventoried in the 1-minute block 41 that has coordinate "Cb41".

ANNE ARUNDEL COUNTY, MARYLAND
(Example, AA Fe 47)



DELAWARE
(Example Gd 34-2)



WELL PREFIXES OF MARYLAND COUNTIES

Allegany	AL	Howard	HO
Anne Arundel	AA	Kent	KE
Baltimore	BA	Montgomery	MO
Calvert	CA	Prince Georges	PG
Caroline	CO	Queen Annes	QA
Carroll	CL	St. Marys	SM
Cecil	CE	Somerset	SO
Charles	CH	Talbot	TA
Dorchester	DO	Washington	WA
Frederick	FR	Wicomico	WI
Harford	HA	Worcester	WO
Garrett	GA		

WASHINGTON, D.C.

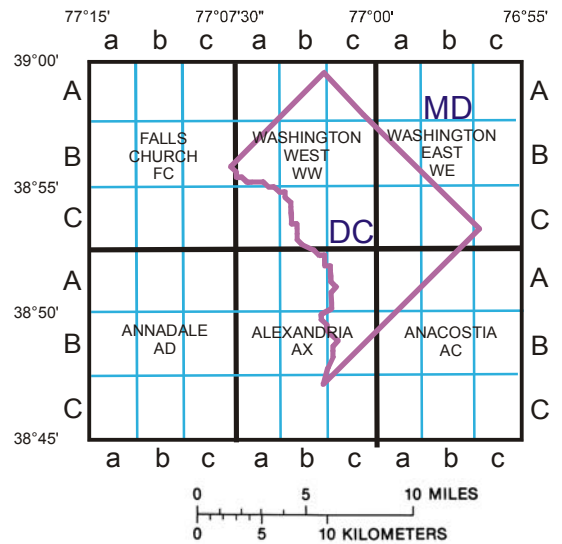


Figure 5. -- Well naming system used in Maryland, Delaware, and Washington, D.C.

Washington, D.C.

Ground-water studies by the U.S. Geological Survey apply a numbering system using the six 7 1/2-minute quadrangle maps that cover parts of Washington, D.C. Each quadrangle is divided into nine rectangles by lines drawn at the 2 1/2-minute intervals. The rectangles are lettered A, B, and C from top to bottom, and a, b, and c from west to east. An upper case single or double letter is designated for the quadrangle name as follows:

FC -----	Falls Church	AN -----	Annandale
WW -----	Washington West	AX -----	Alexandria
WE -----	Washington East	AC -----	Anacostia

The wells and springs are numbered sequentially in each quadrangle. Well WW-Cc 12 is the twelfth well inventoried in the southeastern most rectangle designated as Cc, in the Washington West Quadrangle.

Records of Ground-Water Levels

Water-level data and spring discharges from the Maryland and Delaware Ground-Water-Level Monitoring Networks, and observation wells from ground-water projects are reported. These data are intended to provide historical water-level information for ground-water management, and identify ground-water conditions in project areas. The observation-well networks were established to observe ground-water level fluctuations through time and to identify areas of man-induced and natural climatic stress on the ground-water-flow system. The locations of the State network spring and observation wells in Maryland and Delaware are shown on Figure 6. The locations of project wells are shown on Figure 7.

Data Collection and Computation

Measurements of water levels are made in many types of water wells under various conditions. These methods of measurement are standardized to incorporate continuous precision. The equipment and measuring techniques used at each observation well ensure that the measurements at each well are of consistent accuracy and reliability.

The water-level data tables and hydrographs are presented in alphabetical order by counties. The primary identification number is the State well number that appears in the upper left hand corner. The secondary identification number is the 15-digit site identification number (see Latitude-Longitude System section on page 8).

Water levels are measured manually by steel tape or by an electric tape (meter) approximately every 4 to 6 weeks; some wells are equipped with continuous digital water-level recorders to observe daily fluctuations. The water levels are referenced to the nearest hundredth of a foot below land-surface datum (**lsd**) and/or above sea level. Land-surface datum is a datum plane that is approximately at land surface at each well. The elevation of the land-surface datum and the height of the measuring point (**MP**) above or below land-surface datum is given in each well description. Water levels for wells equipped with graphic or digital recorders report the daily maximum and minimum values.

Data Presentation

A description of each observation well precedes the water-level tables and hydrographs. The following information is given in the description:

SPRING or WELL NUMBER.--(See **Well-Numbering System** section on page 8.)

SITE ID.--A 15-digit number: the first 6 digits are the latitude, the next 7 digits are the longitude, and the last 2 digits refer to the sequence number for identifying one or more wells at a particular latitude and longitude. The site ID is the best location at the time of inventory. The actual latitude and longitude may be slightly different as a result of more up-to-date knowledge of location. The site ID is basically used as an identification number and not an exact location. (See **Latitude-Longitude System** section on page 8.)

PERMIT NUMBER.--The permit number is the State permit number required for drilling wells in Maryland and Delaware. Upon completion of the well, the driller must submit a completion report which documents specific data on the construction of the well. This document also reports the pumpage results in terms of pumping period, yield as gallons per minute, and drawdown.

LOCATION.--The location is the latitude and longitude in the appropriate designation of degrees, minutes, and seconds. The hydrologic unit is a code for the river basin where the well is located (U.S. Geological Survey, Hydrologic Unit Map-1974 States of Maryland and Delaware). A brief local description of the location is also given along with the well-owner's name.

AQUIFER.--The aquifer is the geologic formation from which the well receives its water supply. Each aquifer is identified by its geologic age and the U.S. Geological Survey Ground Water Site Inventory (GWSI) data-base aquifer code.

WELL CHARACTERISTICS.--This describes the type of well, the physical characteristics of the well, and includes a summary of the known construction information.

INSTRUMENTATION.--This provides information on the frequency of measurement of well water levels and the water-level equipment or spring discharge equipment used.

DATUM.--This lists the altitude of land surface above sea level at the well to the nearest 10 feet as determined from a 7 1/2-minute quadrangle topographic map, or to the nearest hundredth or tenth of a foot as determined from surveying. The measuring point (**MP**) is the distance above or below the land surface at the point at which the water-level measurements are made.

REMARKS.--This section gives important miscellaneous data relevant to the spring or well site.

PERIOD OF RECORD.--The period of record lists the beginning and ending month and year of water-level record or "current year" if the records are to be continued into the following year.

EXTREMES FOR PERIOD OF RECORD.--This entry identifies the highest and lowest water levels during the period of record, either as land-surface datum or sea level, and the dates of their occurrence.

Spring Discharge Tables

A table of discharge in gallons per minute follows the station description for each spring. The data appears in a table format showing date and discharge. The discharge measurements are measured volumetrically or by use of a flow meter as indicated in the INSTRUMENTATION section.

Water-Level Tables

A table of water levels follows the station description for each well. Water levels are reported in either of the following table formats:

Hand-held measurements.--If the data are collected by hand-held measurements, the data appear in a table format of date and water level with the datum in reference to land surface or sea level. These values are reported to the nearest hundredth of a foot

Recorder.--Water levels are presented in a two-page 6-month format by water year with columns for daily maximums and minimums. These data are reported in reference to either land surface or sea level datum. The daily maximum column referenced to land-surface data represents the lowest daily water level recorded. The daily minimum column referenced to land surface data represents the highest water level recorded. For data referenced to sea level, the daily maximum column represents the highest daily water level recorded. The daily minimum column represents the lowest daily water level recorded. Missing data are represented by dashes in the table.

Hydrographs

The hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, a 5-year hydrograph is shown starting October 1, 1999 through September 30, 2004. Hydrographs are either referenced to land surface or sea level datum. Each measurement is indicated by a circle and connected with a dashed line to indicate the trend from one measurement to the next. The trend line should be interpreted as a general direction of water-level movement. Actual water levels may deviate from this line. The trend line is usually not drawn if the measurements are greater than 60 days apart. Recorder data are graphed as a continuous line using the lowest water level recorded for each day. Missing data are indicated by a blank space. Missing data may result from recorder malfunctions, battery or clock failures, and/or mechanical problems related to the response of water-level movement in a well. Spring hydrographs are a graphic display of total volumetric flow at the time of measurement in gallons per minute.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, are sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate or chloride concentrations. In special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes. The locations of water-quality wells in Maryland and Delaware are shown in Figure 8.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as part of ground-water studies in specific areas. Consequently, a number of chemical analyses are presented for some Counties, but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality. This can be attained only by considering records for this year in context with similar records obtained for these and other springs and wells in earlier years.

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI) publications referred to in the "On-site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

Data Presentation

The records of ground-water quality are published in a section titled **QUALITY OF GROUND WATER** immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by a well or spring number (**Well Number**). The prime identification number for wells or springs sampled is the 15-digit (**Site ID**) number derived from the latitude-longitude locations. The site ID includes a two-digit sequence number for use at locations having multiple sites. Under the heading **Station Type**, wells are identified by the abbreviation GW for ground water and SP for springs. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water.

The following remark codes may appear with the water-quality data in this report:

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
V	Analyte was detected in both the environmental sample and the associated blank.
M	Presence of material verified but not quantified.

WATER-QUALITY CONTROL DATA

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected are described in the following section. Procedures have been established for the storage of water-quality-control data within the U.S. Geological Survey. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analyses of interest. Any measured value for an analyte (a specific component measured in a chemical analysis) found in a blank sample that was absent in the blank solution, is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected are:

Field Blank - a blank solution that is subjected to all aspects of sample collection, field-processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank - a blank solution that is processed through the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank - a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank - a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank - a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank - a blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

A reference sample is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to insure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner so that the samples are considered to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected are:

Concurrent sample - a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

Sequential sample - a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample - a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Concurrent sample - a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Split sample - a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

ACCESS TO USGS DATA

The U.S. Geological Survey (USGS) is the principal Federal water-data agency and, as such, collects and disseminates much of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Information System (NWIS) an updated version of the former National Water Data Storage and Retrieval System (WATSTORE) provides an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and for release of the data to the public. The computer network system in Baltimore is the main data storage facility for Maryland, Delaware, and Washington, D.C. water data. The following data bases can be accessed for ground-water data:

Ground-Water Site Inventory data base (GWSI) - Contains inventory data for 30,557 ground-water wells, 810 springs, and 2,382 surface water sites. The ground-water data includes site location, geohydrologic characteristics, well construction and manually measured water-level data or spring improvements and discharges, along with other pertinent ground-water information.

Automated Data Processing System (ADAPS) - Contains daily values for 299 observation well water-levels and 726 streamflow stages, along with water temperature, specific conductance, and dissolved oxygen for surface water stations equipped with water-quality monitors.

Quality Water Data base (QWDATA) - Contains analyses of water samples which include environmental and quality control samples that describe the chemical, physical, biological, and radiochemical characteristics of both ground-water sites (4,718 sites, 11,109 analyses), and surface-water stations (958 sites, 39,770 analyses).

State Water Use Data System (SWUDS) - Contains water user consumption information for 2,248 Maryland, and 519 Delaware ground-water use appropriations, and 773 Maryland surface water use appropriations with monthly and daily water use totals.

Some water-quality and ground-water data also are available through the world wide web (WWW). These data may be accessed at:

<http://md.water.usgs.gov/>

Specific ground-water real-time and near real-time water-level observation well data and hydrographs can be accessed on the Maryland, Delaware and Washington, D.C., Water Science Center world wide web (WWW) page at:

http://md.water.usgs.gov/groundwater/web_wells/current/water_table/counties/

http://md.water.usgs.gov/groundwater/web_wells/current/confined/counties/

In addition, data can be provided in various machine-readable formats, such as CD. Information about the availability of specific types of data or products, and user charges, can be obtained from the Water Science Center (See address on bottom of the title page).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens (C. perfringens) is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well. (See also "Aquifer")

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from on site data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (**oxygen gas**) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO_3) can be converted to carbonate concentration by multiplying by 0.60.

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE/EIA method and subsequent transfer to EIA medium. Enterococci include *Streptococcus faecalis*, *Streptococcus faecium*, *Streptococcus avium*, and their variants. (See also "Bacteria")

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium. Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediments.

Fecal coliform bacteria are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestine of warm-blooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semi-volatile organic compounds that are extractable from water in methylene chloride.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Laboratory Reporting Level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.]

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water monitoring spring or well.

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-Term Method Detection Level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, $\mu\text{g/kg}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, $\mu\text{S/cm}$) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum Reporting Level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. See NOAA web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88> (See "North American Vertical Datum of 1988")

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and U.S. first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter Code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine the fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	0.004 - 0.062	Sedimentation
Sand	0.062 - 2.0	Sedimentation/sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition or percent of total is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions at 25 °C with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Sea level, as used in this report, refers to one of the two commonly used national vertical datums, (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See conversion of units page (inside front cover) for identification of the datum used in this report.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (**in milligrams per liter**) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (part per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Suspended (as used in tables of chemical analyses) refers to the amount (**concentration**) of undissolved material in a water-sediment mixture. It is operationally defined as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom: Animal
 Phylum: Arthropoda
 Class: Insecta
 Order: Ephemeroptera
 Family: Ephemeridae
 Genus: *Hexagenia*
 Species: *Hexagenia limbata*

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Total is the amount of a given constituent in a representative whole-water (**unfiltered**) sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which is found the water table.

Water year in USGS Water Resources Discipline reports is the 12-month period starting October 1, and ending September 30 of the following year. Thus, the "2002" water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. "water year" begins October 1, 2001 and ends September 30, 2002.

WDR is used as an abbreviation for "Water-Data Report" in the "REVISED RECORDS" paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976.)

WSP is used as an acronym for "Water-Supply Paper" in reference to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The USGS publishes a series of manuals titled the "Techniques of Water-Resources Investigations" that describe procedures for planning and conducting specialized work in water-resources investigations. The material in these manuals is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. Each chapter is then limited to a narrow field of the section subject matter. This publication format permits flexibility when revision or printing is required.

Manuals in the Techniques of Water-Resources Investigations series, which are listed below, are available online at <http://water.usgs.gov/pubs/twri>. Printed copies are available for sale from the USGS, Information Services Box 25286, Federal Center, Denver Colorado 80225 (an authorized agent of the Superintendent of Documents, Government Printing Office). Please telephone "1-888-ASK-USGS" for current prices, and refer to the title, book number, section number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations." Other products can be viewed online at <http://www.usgs.gov/sales.html>, or ordered by telephone at (303) 236-4693. Order forms for FAX requests are available online at <http://mac.usgs.gov/isb/pubs/forms>. Prepayment by major credit card, check, or money order payable to the U.S. Geological Survey is required.

Book 1. Collection of Water Data by Direct Measurement**Section D. Water Quality**

- 1-D1. Water temperature - influential factors, field measurements, and data presentation, by H.H. Stevens Jr., J.F. Ficke, and G.F. Smoot: USGS - WRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W.W. Wood: USGS - TWRI Book 1, Chapter D2. 1976. 24 pages.

Book 2. Collection of Environmental Data**Section D. Surface Geophysical Methods**

- 2-D1. Application of surface geophysics to ground-water investigations, by A.A.R. Zohdy, G.P. Easton, and D.R. Mabey: USGS - TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. Application of seismic-refraction techniques to hydrologic studies, by F.P. Haeni: USGS - TWRI Book 2, Chapter D2. 1988. 86 pages.

Section E. Subsurface Geophysical Methods

- 2-E1. Application of borehole geophysics to water-resources investigations, by W.S. Keys and L.M. McCary: USGS - TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. Borehole geophysics applied to ground-water investigations, by W.S. Keys: USGS - TWRI Book 2, Chapter E2. 1990. 150 pages.

Section F. Drilling and Sample Methods

- 2-F1. Application of drilling, coring, and sampling techniques to test holes and wells, by Eugene Shuter and W.E. Teasdale: USGS - TWRI Book 2, Chapter F1. 1989. 97 pages.

Book 3. Application of Hydraulics**Section A. Surface-Water Techniques**

- 3-A1. General field and office procedures for indirect discharge measurements, by M.A. Benson and Tate Dalrymple: USGS - TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M.A. Benson: USGS - TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. Measurement of peak discharge at culverts by indirect methods, by G.L. Bodhaine: USGS - TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. Measurement of peak discharge at width contractions by indirect methods, by H.F. Metthai: USGS - TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS - TWRI Book 3, Chapter A5. 1967. 29 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 3-A6. General procedure for gaging streams, by R.W. Carter and Jacob Dividian: USGS - TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. Stage measurements at gaging stations, by T.J. Buchanan and W.P. Somers: USGS - TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. Discharge measurements at gaging stations, by T.J. Buchanan and W.P. Somers: USGS - TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. Measurement of time of travel and dispersion in streams by dye tracing, by F.A. Kilpatrick, and J.F. Wilson, Jr.: USGS - TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. Discharge ratings at gaging stations, by E.J. Kennedy: USGS - TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. Measurement of discharge by moving-boat method, by G.F. Smoot and C.E. Novak: USGS - TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. Fluorometric procedures for dye tracing, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS - TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. Computation of continuous records of streamflow, by E.J. Kennedy: USGS - TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. Use of flumes in measuring discharge, by F.A. Kilpatrick and V.R. Schneider: USGS - TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS - TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. Measurement of discharge using tracers, by F.A. Kilpatrick and E.D. Cobb: USGS - TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. Acoustic velocity meter systems, by Antonius Laenen: USGS - TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. Determination of stream reaeration coefficients by use of tracers, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotskura, G.W. Parker, and L.L. Delong: USGS - TWRI Book 3, Chapter 18. 1989. 52 pages.
- 3-A19. Levels of streamflow gaging stations, by E.J. Kennedy: USGS - TWRI Book 3, Chapter A19. 1990. 31 pages.
- 3-A20. Simulation of soluble waste transport and buildup in surface waters using tracers, by F.A. Kilpatrick: USGS - TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-A21. Stream-gaging cableways, by C. Russell Wasgner: USGS - TWRI Book 3, Chapter A21. 1995. 56 pages.

Section B. Ground-Water Techniques

- 3-B1. Aquifer-test design, observation, and data analysis, by R.W. Stallman: USGS - TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. Introduction to ground-water hydraulics, a programmed text for self-instruction, by G.D. Bennett: USGS - TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. Type curves for selected problems of flow to wells in confined aquifers, by J.E. Reed: USGS - TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. Regression modeling of ground-water flow, by R.L. Cooley and R.L. Naff: USGS - TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. Supplement 1. Regression modeling of ground-water flow - Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems, by R.L. Cooley: USGS - TWRI Book 3, Chapter B4. 1993. 8 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 3-B5. Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems - An introduction, by O.L. Franke, T.W. Reilly, and G.D. Bennett: USGS - TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. The principle of superposition and its application in ground-water hydraulics, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS - TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. Analytical solutions for one-, two-, and three dimensional solute transport in ground-water systems with uniform flow, by E.J. Wexler: USGS - TWRI Book 3, Chapter B7. 1992. 190 pages.
- 3-B8. System and boundary conceptualization in ground-water flow simulation, by T.E. Reilly: USGS - TWRI Book 3, Chapter B8. 2001. 29 pages.

Section C. Sedimentation and Erosion Techniques

- 3-C1. Fluvial sediment concepts, by H.P. Guy: USGS - TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. Field methods of measurement of fluvial sediment, by H.P. Guy and V.W. Norman: USGS - TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS - TWRI Book 3, Chapter C3. 1972. 66 pages.

Book 4. Hydrologic Analysis and Interpretation**Section A. Statistical Analysis**

- 4-A1. Some statistical tools in hydrology, by H.C. Riggs: USGS - TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. Frequency curves, by H.C. Riggs: USGS - TWRI Book 4, Chapter A2. 1968. 15 pages.

Section B. Surface Water

- 4-A3. Statistical methods in water resources, by D.R. Helsel and R.M. Hirsch: USGS - TWRI Book 4, Chapter A3. 1991. Available only online at [http:// water.usgs.gov/pubs/twri/twri4a3](http://water.usgs.gov/pubs/twri/twri4a3). Accessed July 2004.
- 4-B1. Low-flow investigations, by H.C. Riggs: USGS - TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. Storage analyses for water supply, by H.C. Riggs and C.H. Hardison: USGS - TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. Regional analyses of streamflow characteristics, by H.C. Riggs: USGS - TWRI Book 4, Chapter B3. 1973. 15 pages.

Section D. Interrelated phases of the Hydrologic Cycle

- 4-D1. Computation of rate and volume of stream depletion by wells, by C.T. Jenkins: USGS - TWRI Book 4, Chapter D1. 1970. 17 pages.

Book 5. Laboratory Analysis**Section A. Water Analysis**

- 5-A1. Methods for determination of inorganic substances in water and fluvial sediments, by M.J. Fishman and L.C. Friedman: USGS - TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. Determination of minor elements in water by emission spectroscopy, by P.R. Barnett and E.C. Malory, Jr.: USGS - TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. Methods for determination of organic substances in water and fluvial sediments, by R.L. Wershaw,
- 5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, by L.J. Britton and P.E. Greenson, editors: USGS - TWRI Book 5, Chapter A4. 1989. 363 pages.
- 5-A5. Methods for determination of radioactive substances in water and fluvial sediments, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS - TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. Quality assurance practices for the chemical and biological analyses of water and fluvial sediments, by L.C. Friedman and D.E. Erdmann: USGS - TWRI Book 5, Chapter A6. 1982. 181 Pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

Section C. Sediment Analysis

5-C1. Laboratory theory and methods for sediment analysis, by H.P. Guy: USGS - TWRI Book 5, Chapter C1. 1969. 58 pages.

Book 6. Modeling Techniques**Section A. Ground Water**

- 6-A1. A modular three-dimensional finite-difference ground-water flow model, by M.G. McDonald and A.W. Harbaugh: USGS - TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model, by S.A. Leake and D.E. Prudic: USGS - TWRI Book 6, Chapter A2. 1991. 68 pages.
- 6-A3. A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual, by L.J. Torak: USGS - TWRI Book 6, Chapter A3. 1993. 136 pages.
- 6-A4. A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions, by R.L. Cooley: USGS - TWRI Book 6, Chapter A4. 1992. 108 pages.
- 6-A5. A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details, by L.J. Torak: USGS - TWRI Book 6, Chapter A5. 1993. 243 pages.
- 6-A6. A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction, by E.D. Swain and E.J. Wexler: USGS - TWRI Book 6, Chapter A6. 1995. 125 pages.
- 6-A7. User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow, by Weixing Guo and C.D. Langevin: USGS - TWRI Book 6, Chapter A7. 2002. 77 pages.

Book 7. Automated Data Processing and Computations**Section C. Computer Programs**

- 7-C1. Finite difference model for aquifer simulation in two dimensions with results of numerical experiments, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS - TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. Computer model of two-dimensional solute transport and dispersion in ground water, by L.F. Konikow and J.D. Bredehoeft: USGS - TWRI Book 7, Chapter C2. 1978. 90 pages.

Book 8. Instrumentation**Section A. Instruments for Measurement of Water Level**

- 7-C3. A model for simulation of flow in singular and interconnected channels, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS - TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. Methods of measuring water levels in deep wells, by M.S. Garber and F.C. Koopman: USGS - TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. Installation and service manual for U.S. Geological Survey manometers, by J.D. Craig: USGS - TWRI Book 8, Chapter A2. 1983. 57 pages.

Section B. Instruments for Measurement of Discharge

- 8-B2. Calibration and maintenance of vertical-axis type current meters, by G.F. Smoot and C.E. Novak: USGS - TWRI Book 8, Chapter B2. 1968. 15 pages.

Book 9. Handbooks for Water-Resources Investigations**Section A. National Field Manual for the Collection of Water-Quality Data**

- 9-A1. National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS - TWRI Book 9, Chapter A1. 1998. Variously paginated.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 9-A2. National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS - TWRI Book 9, Chapter A2. 1998. Variously paginated.
- 9-A3. National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS - TWRI Book 9, Chapter A3. 1998. Variously paginated.
- 9-A4. National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS - TWRI Book 9, Chapter A4. 1999. Variously Paginated.
- 9-A5. National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS - TWRI Book 9, Chapter A5. 1999. Variously Paginated.
- 9-A6. National Field Manual for the Collection of Water-Quality Data: Field Measurements, edited by F.D. Wilde and D.B. Radtke: USGS - TWRI Book 9, Chapter A6. 1999. Variously Paginated.
- 9-A7. National Field Manual for the Collection of Water-Quality Data: Biological Indicators, edited by D.N. Myers and F.D. Wilde: USGS - TWRI Book 9, Chapter A7. 1997 and 1999. Variously Paginated.
- 9-A8. National Field Manual for the Collection of Water-Quality Data: Bottom-material samples, edited by D.B. Radtke: USGS - TWRI Book 9, Chapter A8. 1998. Variously Paginated.
- 9-A9. National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities, edited by S.L. Lane and R.G. Fay: USGS - TWRI Book 9, Chapter A9. 1998. Variously Paginated.

SELECTED U.S. GEOLOGICAL SURVEY REPORTS ON GROUND-WATER RESOURCES IN MARYLAND, DELAWARE, AND WASHINGTON, D.C. PUBLISHED DURING THE 2004 WATER YEAR

Listed below is a selection of reports on ground-water resources in Maryland, Delaware, and Washington, D.C. which were published in 2003, and are available through the U.S. Geological Survey, Branch of Information Services, Federal Center, Building 41, Box 25286, Denver, Colorado 80225 or on the internet at: http://mapping.usgs.gov/esic/prices/other_publications.html.

A list of all the published reports by the U.S. Geological Survey for Maryland, Delaware, and Washington, D.C. can be found on the web at <http://md.water.usgs.gov/publications/online.html>

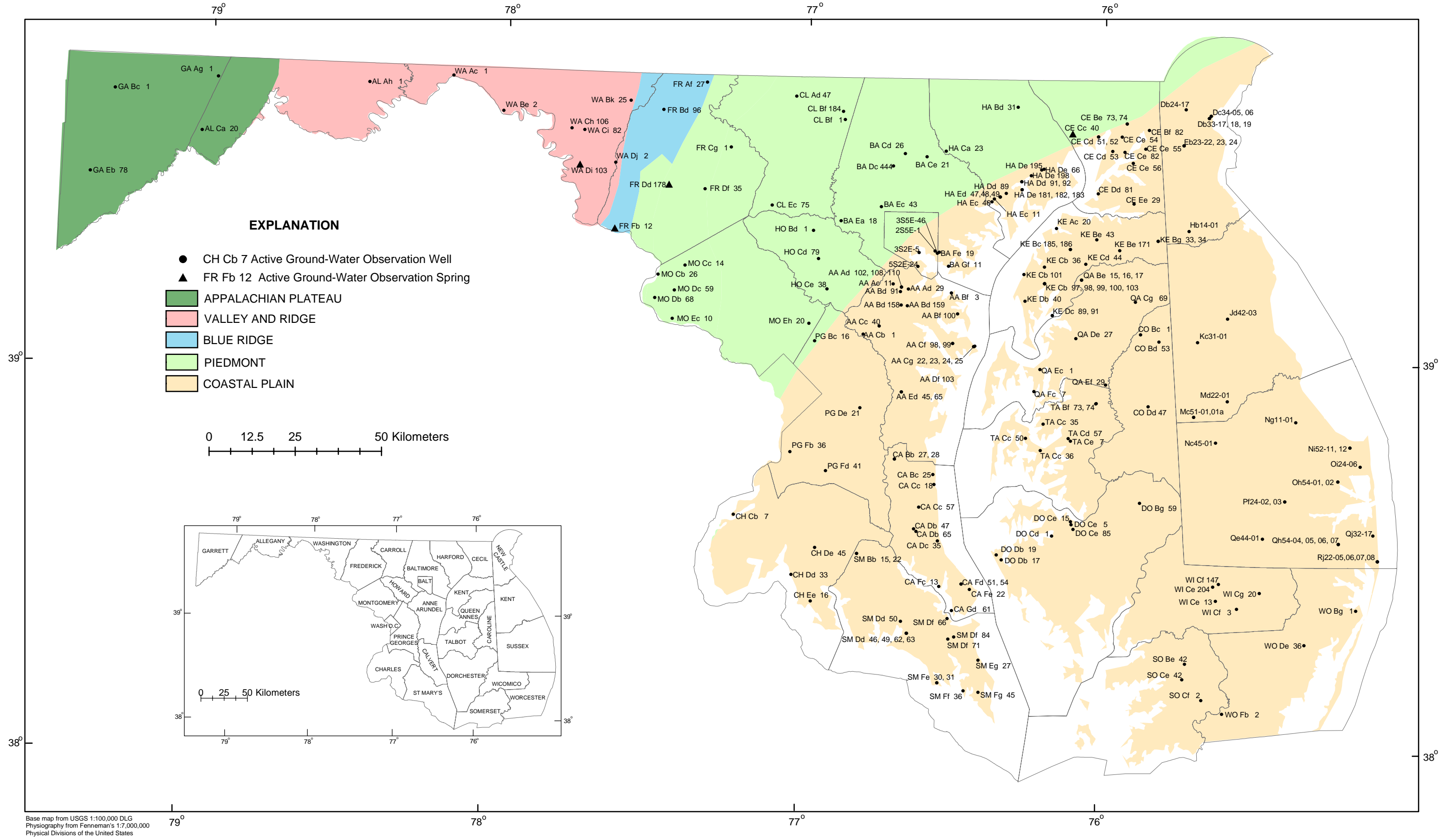


Figure 1. Map of Maryland, Delaware, and Washington D.C. showing location of ground-water network observation wells and springs.

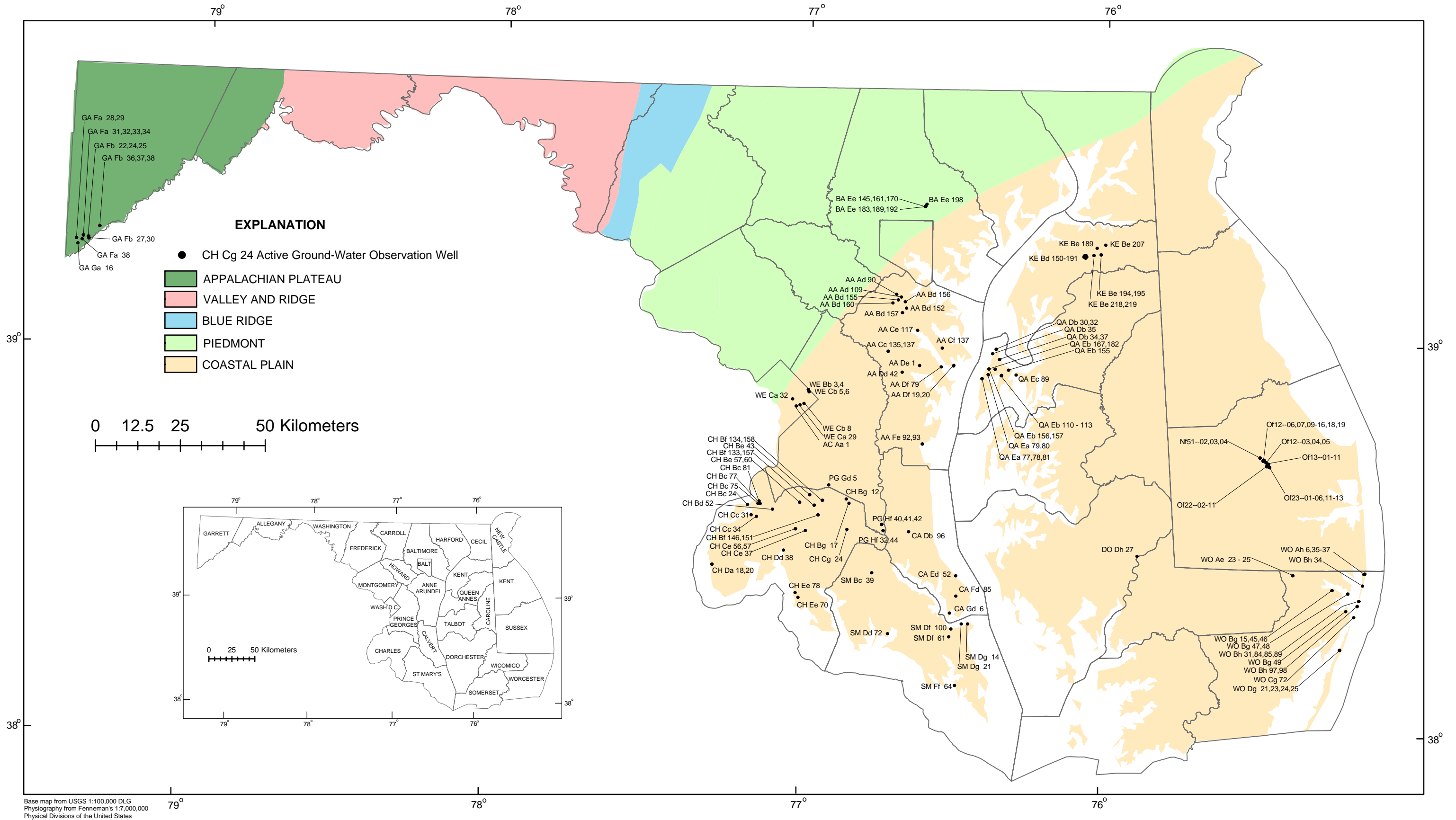


Figure 2. Map of Maryland, Delaware, and Washington D.C. showing location of ground-water project observation wells.

CECIL COUNTY

SPRING NUMBER.--CE Cc 40. SITE ID.--393459076045001.

LOCATION.--Lat 39°34'59", long 76°04'50", Hydrologic Unit 02050306, 0.1 mi north of intersection of Cokesbury and St. Marks Church Roads, 0.8 mi northeast of Perryman. Owner: Private Residence.

AQUIFER.--James Run Formation, Frenchtown Member of Paleozoic age. Aquifer code: 300JMSR.

SPRING IMPROVEMENTS.--2 in. outflow pipe.

INSTRUMENTATION.--Monthly volumetric discharge measurements by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 180 ft above National Geodetic Vertical Datum of 1929, from topographic map.

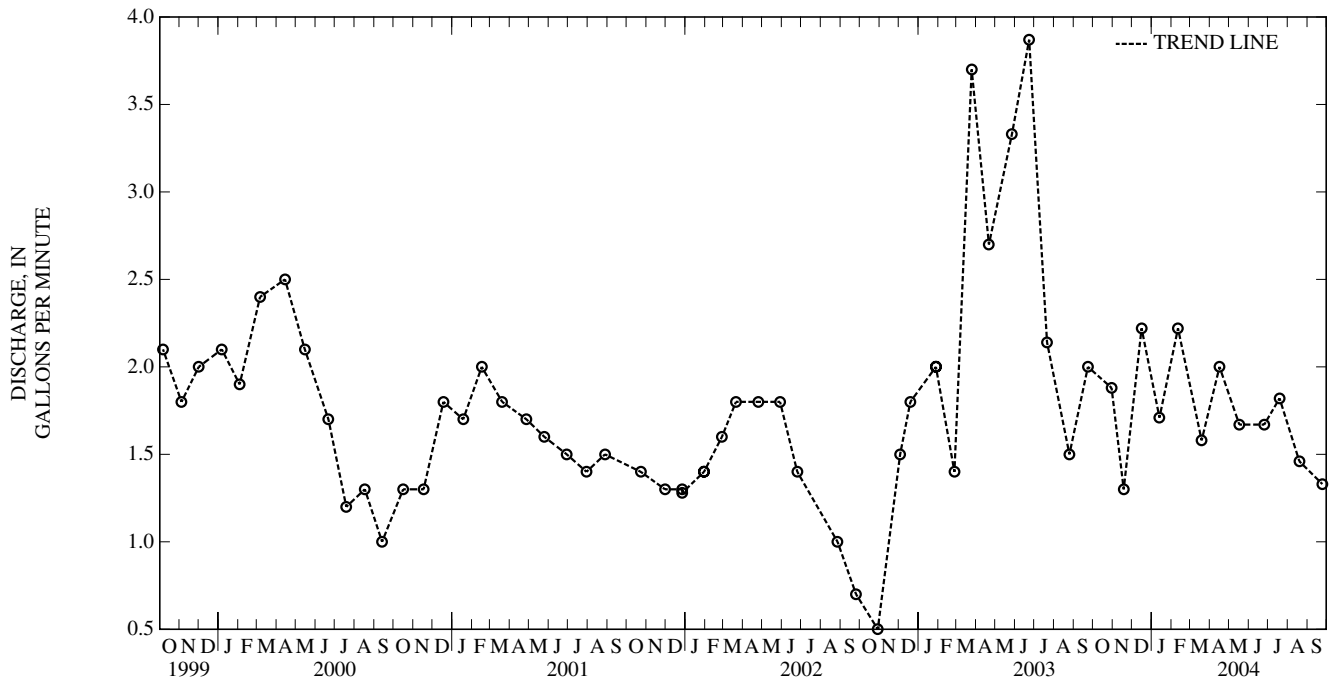
REMARKS.--Maryland Ground-Water Spring Discharge Monitoring Network, and Water Quality Network observation spring. Temperature readings are available.

PERIOD OF RECORD.--April 1981, August 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 5.9 gal/min, June 7, 1980; minimum discharge measured, 0.5 gal/min, October 29, 2002.

DISCHARGE, IN GALLONS PER MINUTE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
OCT 30, 2003	1.9	JAN 13, 2004	1.7	APR 16, 2004	2.0	JUL 19, 2004	1.8
NOV 18	1.3	FEB 11	2.2	MAY 17	1.7	AUG 19	1.5
DEC 16	2.2	MAR 19	1.6	JUN 25	1.7	SEP 24	1.3
HIGHEST	2.2	DEC 16, 2003	FEB 11, 2004				
LOWEST	1.3	NOV 18, 2003	SEP 24, 2004				



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GROUND-WATER SPRING DISCHARGE IN MARYLAND

FREDERICK COUNTY—Continued

SPRING NUMBER.--FR Fb 12. SITE ID.--391846077370501.

LOCATION.--Lat 39°18'46", long 77°37'05", Hydrologic Unit 02070008, at Brunswick, off Park Ave., 300 ft north of intersection with Potomac St. Owner: Town of Brunswick.

AQUIFER.--Precambrian Erathem of Precambrian age. Aquifer code: 400PCMB.

SPRING IMPROVEMENTS.--2 in. outflow pipe.

INSTRUMENTATION.--Monthly volumetric discharge measurements by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 300 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Maryland Ground-Water Spring Discharge Monitoring Network, and Water Quality Network observation spring. Temperature readings are available.

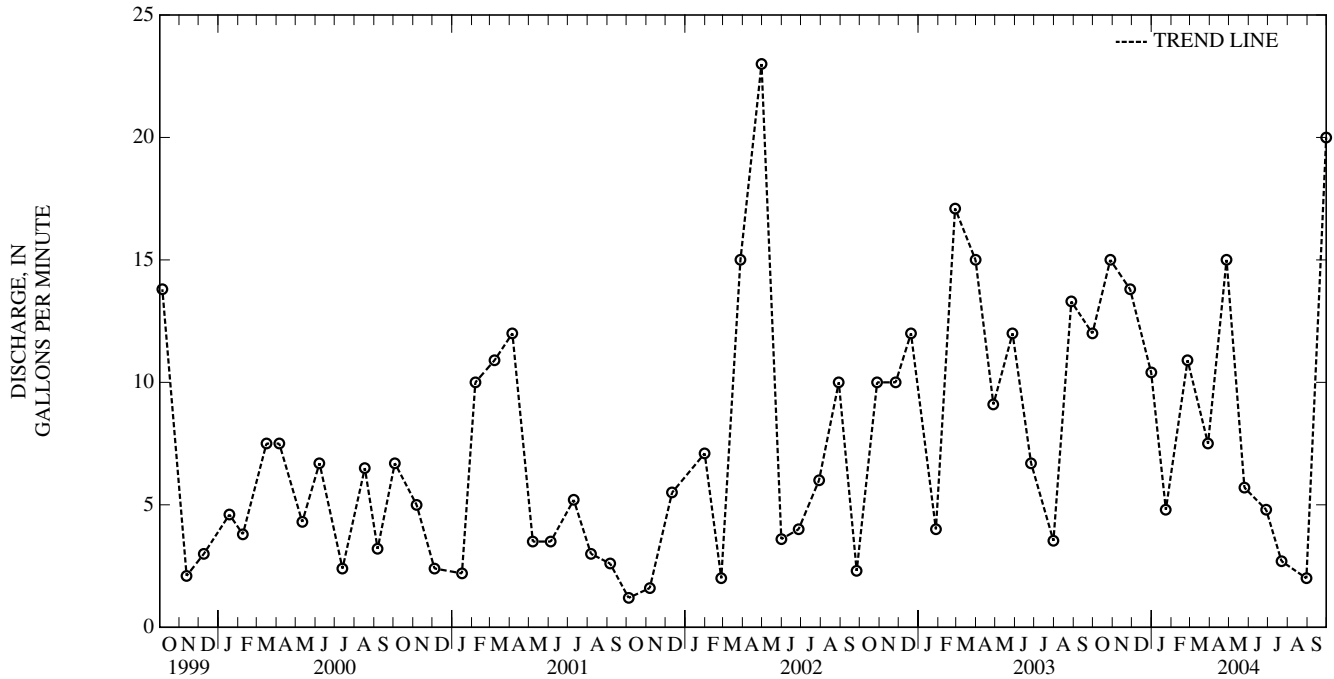
PERIOD OF RECORD.--January 1960 to April 1964, March 1965, August 1967, December 1968, July 1972, and April 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 36.0 gal/min, April 30, 1964; minimum discharge measured, 0.5 gal/min, August 12, 1999.

DISCHARGE, IN GALLONS PER MINUTE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
OCT 28, 2003	15.0	JAN 23, 2004	4.8	APR 27, 2004	15.0	JUL 22, 2004	2.7
NOV 28	13.8	FEB 26	10.9	MAY 25	5.7	AUG 30	2.0
DEC 31	10.4	MAR 29	7.5	JUN 28	4.8	SEP 30	20.0

HIGHEST 20.0 SEP 30, 2004
 LOWEST 2.0 AUG 30, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WASHINGTON COUNTY

SPRING NUMBER.--WA Di 103. SITE ID.--392836077442701.

LOCATION.--Lat 39°28'36", long 77°44'27", Hydrologic Unit 02070004, 0.2 mi southeast of Smoketown Road and Mummas Lane, 1.0 mi north of Sharpsburg. Owner: National Park Service, Antietam National Battlefield.

AQUIFER.--Conococheague Limestone of Upper Cambrian age. Aquifer code: 371CCCG.

SPRING IMPROVEMENTS.--Springhouse with cement trough.

INSTRUMENTATION.--Monthly volumetric discharge measurements by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 475 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Maryland Ground-Water Spring Discharge Monitoring Network, and Water Quality Network observation spring. Temperature readings are available.

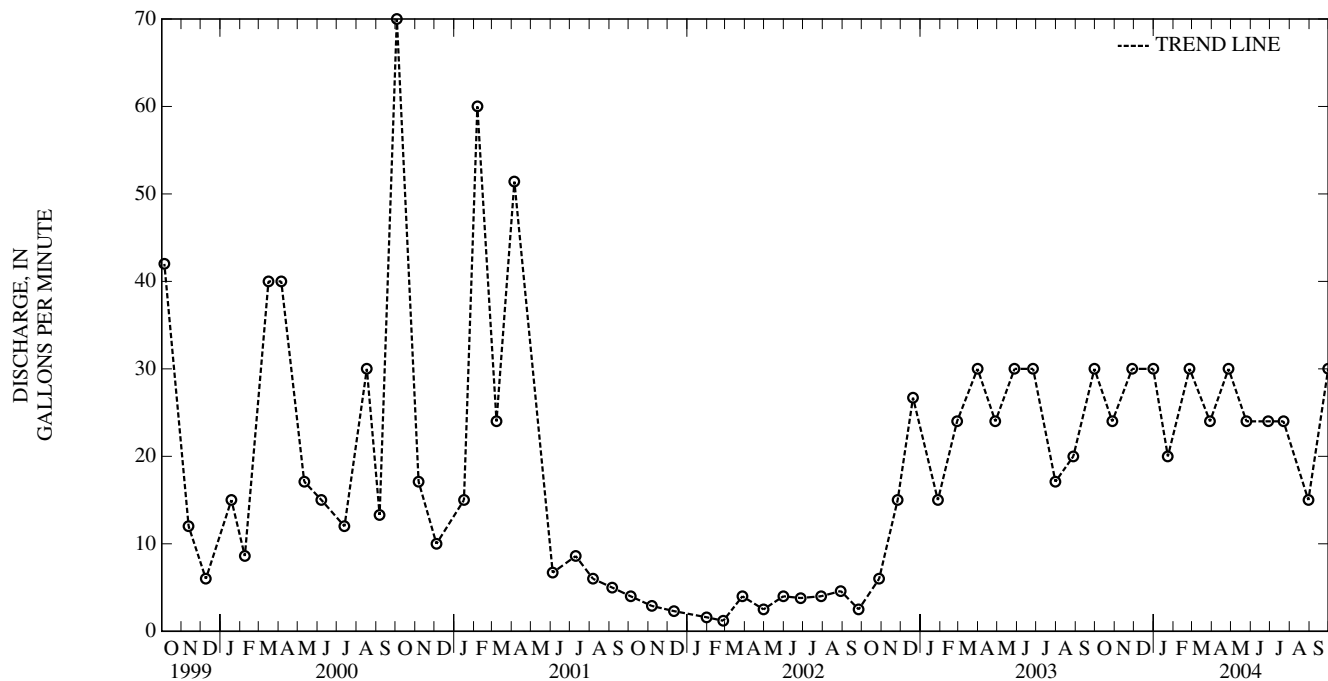
PERIOD OF RECORD.--May 1969, April 1987, and January 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 95.0 gal/min, May 14, 1998; minimum discharge measured, 0.3 gal/min, October 4, 1991 and November 7, 1991.

DISCHARGE, IN GALLONS PER MINUTE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
OCT 28, 2003	24.0	JAN 23, 2004	20.0	APR 27, 2004	30.0	JUL 22, 2004	24.0
NOV 28	30.0	FEB 26	30.0	MAY 25	24.0	AUG 30	15.0
DEC 31	30.0	MAR 29	24.0	JUN 28	24.0	SEP 30	30.0

HIGHEST 30.0 NOV 28, DEC 31, 2003, FEB 26, APR 27, SEP 30, 2004
 LOWEST 15.0 AUG 30, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GROUND-WATER LEVELS IN DELAWARE

KENT COUNTY

WELL NUMBER.--Jd42-03. SITE ID.--390607075331501. PERMIT NUMBER.--10230.

LOCATION.--Lat 39°06'07", long 75°33'15", Hydrologic Unit 02040207, 1 mi south of Camden. Owner: Delaware Department of Transportation.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 11 ft; casing diameter 1.25 in., to 8.5 ft; well point from 8.5 to 11 ft.

INSTRUMENTATION.--Monthly water level measurements with electric or chalked steel tape by Delaware Geological Survey or U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

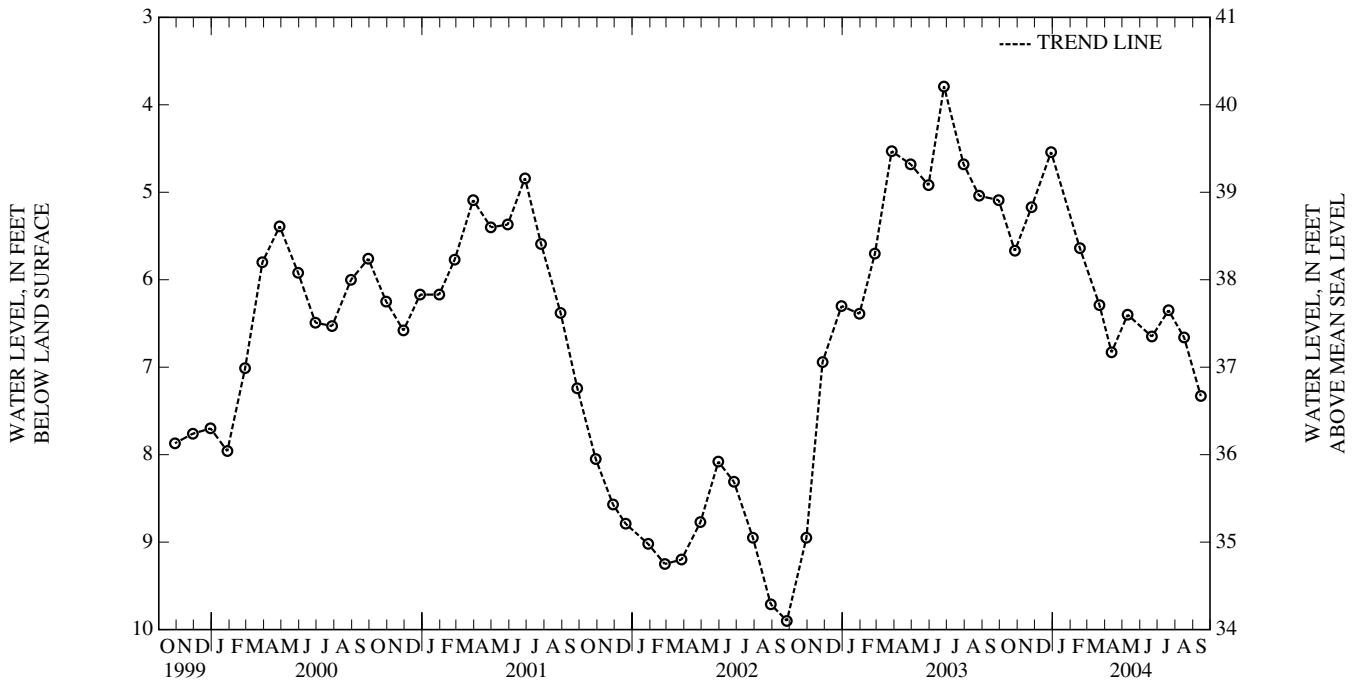
PERIOD OF RECORD.--October 1950 to December 1961, August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.69 ft below land surface, July 18, 1975; lowest measured, 10.10 ft below land surface, November 28, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	5.67	FEB 17, 2004	5.64	MAY 10, 2004	6.40	AUG 16, 2004	6.66
NOV 25	5.17	MAR 22	6.29	JUN 21	6.65	SEP 14	7.33
DEC 29	4.54	APR 12	6.83	JUL 20	6.35		

HIGHEST 4.54 DEC 29, 2003
 LOWEST 7.33 SEP 14, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--Kc31-01. SITE ID.--390224075391601. PERMIT NUMBER.--33610.

LOCATION.--Lat 39°02'24", long 75°39'16", Hydrologic Unit 02060005, 1.1 mi southwest of Petersburg, off Ironmine Rd., at Norman G. Wilder State Wildlife Area. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 380 ft; casing diameter 2 in., to 370 ft; screen diameter 2 in., from 370 to 380 ft.

INSTRUMENTATION.--Twice yearly water level measurements with chalked steel tape by Delaware Geological Survey or U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.20 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. No Spring 1997 water-level measurement.

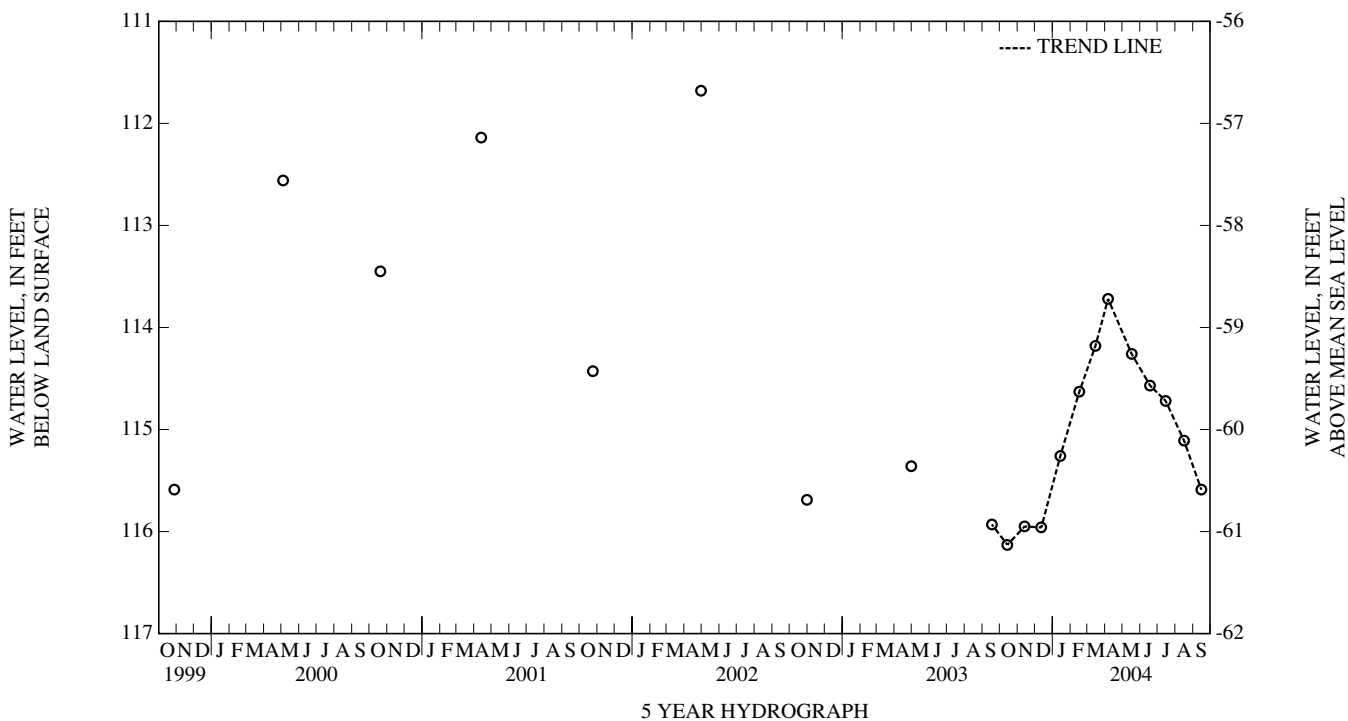
PERIOD OF RECORD.--February 1975, April 1982, March 1983, and February 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 92.99 ft below land surface, February 20, 1975; lowest measured, 116.77 ft below land surface, October 29, 1991.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	116.13	JAN 14, 2004	115.26	APR 06, 2004	113.72	JUL 15, 2004	114.72
NOV 13	115.95	FEB 16	114.63	MAY 17	114.26	AUG 16	115.11
DEC 12	115.96	MAR 15	114.18	JUN 18	114.57	SEP 15	115.59

HIGHEST 113.72 APR 06, 2004
 LOWEST 116.13 OCT 14, 2003



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--Mc51-01. SITE ID.--385041075395601.

LOCATION.--Lat 38°50'41", long 75°39'56", Hydrologic Unit 02060008, 1.3 mi northeast of Adamsville. Owner: Delaware Department of Transportation.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18.1 ft; casing diameter 2 in., to 16.1 ft; well point from 16.1 to 18.1 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60 minute recorder interval from October 1999 to July 2001.

DATUM.--Elevation of land surface is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

REMARKS.--Delaware Water-level Monitoring Network observation well.

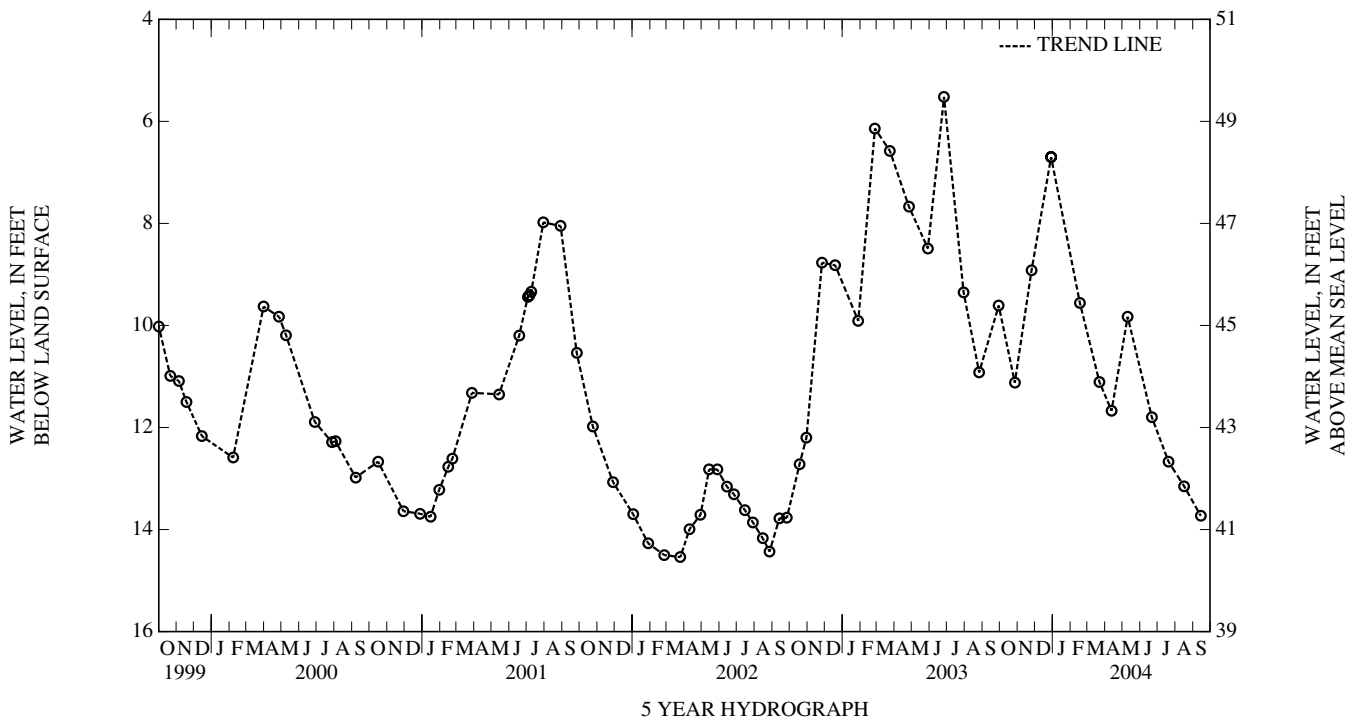
PERIOD OF RECORD.--September 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.28 ft below land surface, May 31, 1984; lowest measured, 16.29 ft below land surface, January 19, 1988.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	11.12	DEC 29, 2003	6.70	APR 12, 2004	11.67	JUL 20, 2004	12.67
NOV 25	8.92	FEB 17, 2004	9.56	MAY 10	9.83	AUG 16	13.15
DEC 29	6.70	MAR 22	11.11	JUN 21	11.80	SEP 14	13.73

HIGHEST 6.70 DEC 29, 2003 DEC 29, 2003
 LOWEST 13.73 SEP 14, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--Mc51-01a. SITE ID.--385041075395602. PERMIT NUMBER.--178923.

LOCATION.--Lat 38°50'41", long 75°39'56", Hydrologic Unit 02060008, 1.3 mi northeast of Adamsville. Owner: Delaware Department of Transportation.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18.2 ft; casing diameter 2 in., to 15 ft; well point from 15 to 19 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape or chalked steel tape by U.S. Geological Survey personnel. Well equipped with water-level telemetry recorder from July 2001 to current year.

DATUM.--Elevation of land surface is 56 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder platform, 3.75 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.65 ft below land surface, March 9, 2003 (recorder); lowest measured, 15.57 ft below land surface, March 18-21, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	11.97	JAN 29, 2004	10.54	APR 12, 2004	12.54	JUL 20, 2004	13.54
NOV 25	9.84	FEB 17	10.42	MAY 10	10.71	AUG 16	14.18
DEC 29	7.53	MAR 22	11.94	JUN 21	12.66	SEP 14	14.63
HIGHEST	7.53	DEC 29, 2003					
LOWEST	14.63	SEP 14, 2004					

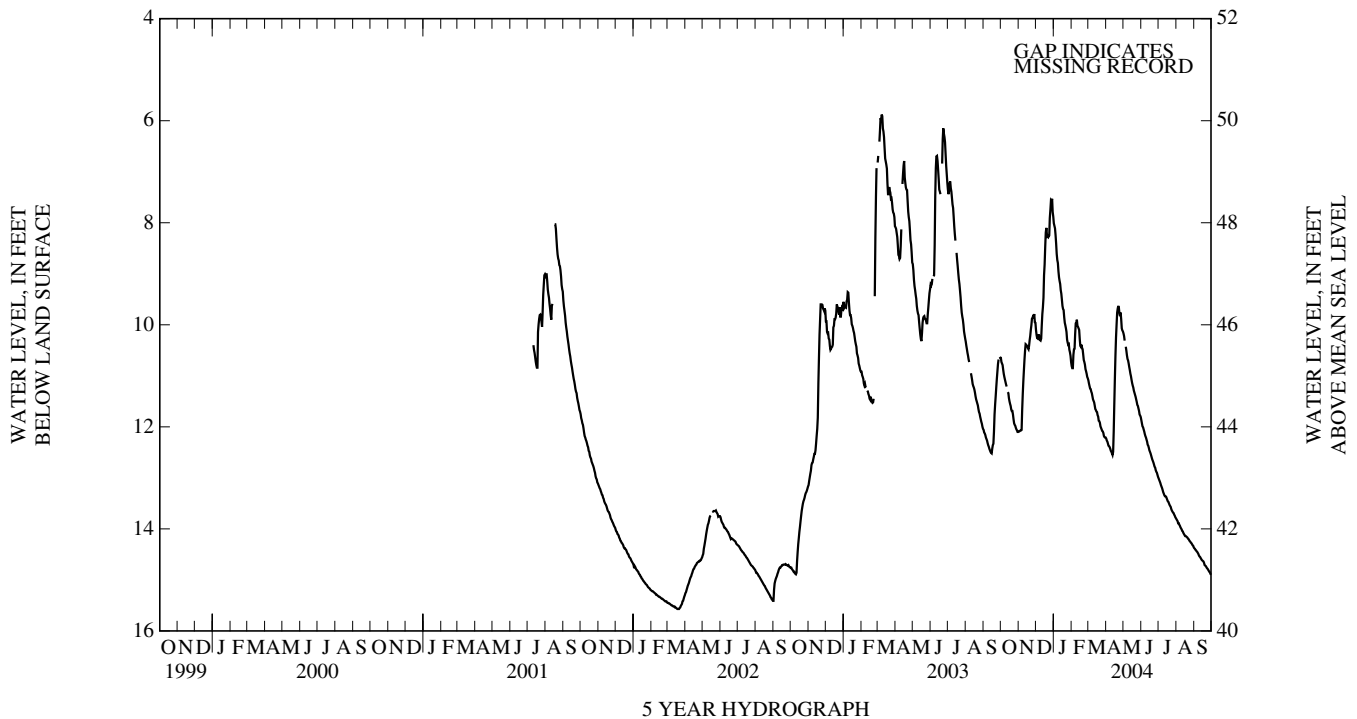
DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.65	10.64	12.09	12.08	10.10	9.93	8.01	7.82	10.81	10.73	11.09	11.05
2	10.73	10.65	12.09	12.08	10.20	10.10	8.06	7.95	10.85	10.81	11.15	11.09
3	10.76	10.73	12.08	12.07	10.26	10.20	8.11	8.03	10.85	10.59	11.20	11.15
4	10.79	10.72	12.07	12.06	10.27	10.23	8.24	8.11	10.59	10.45	11.25	11.20
5	10.88	10.79	12.07	12.05	10.23	10.10	8.41	8.21	10.48	10.44	11.26	11.21
6	10.96	10.88	12.06	11.67	10.19	10.11	8.61	8.41	10.47	10.19	11.31	11.21
7	11.02	10.96	11.67	11.36	10.27	10.19	8.73	8.61	10.19	9.88	11.34	11.29
8	11.07	11.02	11.36	11.11	10.30	10.27	8.79	8.73	9.98	9.88	11.40	11.29
9	11.12	11.07	11.11	10.89	10.31	10.27	8.95	8.79	9.98	9.90	11.46	11.40
10	11.17	11.12	10.89	10.69	10.27	10.02	9.07	8.95	9.90	9.86	11.49	11.46
11	11.21	11.17	10.69	10.51	10.02	9.79	9.14	9.06	10.02	9.88	11.52	11.49
12	---	---	10.51	10.34	9.79	9.66	9.20	9.04	10.04	10.02	11.58	11.50
13	11.32	11.26	10.38	10.33	9.66	9.47	9.32	9.19	10.07	10.02	11.65	11.58
14	11.34	11.23	10.39	10.38	9.47	9.03	9.39	9.22	10.10	10.06	11.67	11.64
15	11.44	11.25	10.41	10.38	9.03	8.82	9.51	9.20	10.28	10.10	11.70	11.64
16	11.50	11.44	10.42	10.41	8.82	8.47	9.63	9.51	10.41	10.28	11.71	11.65
17	11.55	11.50	10.46	10.41	8.47	8.19	9.69	9.63	10.43	10.39	11.77	11.71
18	11.59	11.55	10.48	10.41	8.19	8.10	9.71	9.51	10.39	10.35	11.80	11.77
19	11.66	11.59	10.41	10.28	8.10	8.03	9.85	9.71	10.45	10.37	11.88	11.76
20	11.69	11.66	10.30	10.22	8.23	8.05	9.96	9.85	10.48	10.39	11.89	11.78
21	11.69	11.64	10.22	10.10	8.30	8.21	10.01	9.96	10.58	10.39	11.92	11.77
22	11.76	11.69	10.10	10.01	8.23	8.19	10.07	9.95	10.69	10.58	11.99	11.92
23	11.85	11.76	10.01	9.88	8.27	8.23	10.14	10.07	10.73	10.69	12.02	11.99
24	11.93	11.85	9.88	9.75	8.25	7.91	10.29	10.13	10.78	10.73	12.05	12.02
25	11.96	11.93	9.86	9.81	7.91	7.75	10.35	10.29	10.87	10.78	12.08	12.05
26	11.98	11.96	9.83	9.80	7.75	7.57	10.39	10.34	10.91	10.87	12.09	12.08
27	12.02	11.97	9.84	9.79	7.57	7.53	10.38	10.28	10.96	10.91	12.12	12.09
28	12.05	12.02	9.79	9.64	7.59	7.53	10.49	10.38	11.02	10.96	12.18	12.12
29	12.07	12.02	9.95	9.70	7.53	7.45	10.54	10.49	11.05	11.02	12.20	12.18
30	12.10	12.07	9.96	9.93	7.79	7.41	10.61	10.54	---	---	12.21	12.20
31	12.10	12.09	---	---	7.88	7.77	10.73	10.61	---	---	12.21	12.19
MONTH	12.10	10.64	12.09	9.64	10.31	7.41	10.73	7.82	11.05	9.86	12.21	11.05

GROUND-WATER LEVELS IN DELAWARE

KENT COUNTY—Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.23	12.17	10.17	10.13	11.87	11.80	13.01	12.98	13.81	13.79	14.38	14.36
2	12.27	12.23	10.22	10.15	11.93	11.87	13.04	13.01	13.83	13.81	14.39	14.38
3	12.29	12.27	10.31	10.22	11.99	11.93	13.07	13.04	13.85	13.83	14.41	14.39
4	12.33	12.27	---	---	12.01	11.99	13.10	13.07	13.89	13.85	14.42	14.41
5	12.37	12.33	10.43	10.38	12.05	12.01	13.14	13.10	13.89	13.88	14.44	14.42
6	12.38	12.37	10.51	10.43	12.09	12.05	13.17	13.14	13.92	13.89	14.45	14.44
7	12.40	12.38	10.60	10.51	12.14	12.09	13.20	13.17	13.94	13.92	14.47	14.45
8	12.43	12.40	10.67	10.60	12.18	12.14	13.24	13.20	13.97	13.94	14.49	14.47
9	12.47	12.42	10.70	10.66	12.21	12.18	13.28	13.24	13.99	13.97	14.52	14.49
10	12.49	12.47	10.76	10.70	12.25	12.21	13.31	13.28	14.01	13.99	14.54	14.52
11	12.52	12.49	10.83	10.76	12.29	12.25	13.34	13.31	14.04	14.01	14.55	14.54
12	12.55	12.49	10.89	10.83	12.35	12.29	13.36	13.34	14.05	14.04	14.57	14.55
13	12.49	12.09	10.96	10.89	12.37	12.35	13.36	13.35	14.08	14.05	14.59	14.57
14	12.09	11.57	11.01	10.96	12.41	12.37	13.37	13.35	14.10	14.08	14.61	14.59
15	11.57	11.06	11.08	11.01	12.46	12.41	13.40	13.37	14.12	14.10	14.62	14.61
16	11.06	10.62	11.14	11.08	12.49	12.46	13.43	13.40	14.14	14.12	14.63	14.62
17	10.62	10.25	11.19	11.14	12.52	12.49	13.46	13.43	14.14	14.14	14.64	14.63
18	10.25	9.99	11.23	11.19	12.56	12.52	13.47	13.46	14.15	14.14	14.67	14.64
19	9.99	9.76	11.29	11.23	12.60	12.56	13.50	13.47	14.16	14.15	14.71	14.67
20	9.76	9.68	11.33	11.29	12.64	12.60	13.53	13.50	14.17	14.16	14.72	14.71
21	9.68	9.61	11.37	11.33	12.67	12.64	13.55	13.53	14.19	14.17	14.73	14.72
22	9.63	9.61	11.41	11.36	12.70	12.67	13.57	13.55	14.20	14.19	14.75	14.73
23	9.67	9.61	11.46	11.41	12.74	12.70	13.61	13.57	14.22	14.20	14.77	14.75
24	9.78	9.66	11.51	11.46	12.78	12.74	13.64	13.61	14.24	14.22	14.78	14.77
25	9.83	9.76	11.57	11.51	12.80	12.78	13.66	13.64	14.25	14.24	14.80	14.78
26	9.76	9.73	11.59	11.57	12.85	12.80	13.68	13.66	14.27	14.25	14.82	14.80
27	9.89	9.73	11.64	11.59	12.88	12.85	13.69	13.68	14.28	14.27	14.84	14.82
28	10.07	9.89	11.69	11.63	12.90	12.88	13.72	13.69	14.30	14.28	14.85	14.84
29	10.11	10.07	11.76	11.69	12.94	12.90	13.74	13.72	14.32	14.30	14.88	14.85
30	10.13	10.11	11.78	11.76	12.98	12.94	13.77	13.74	14.33	14.32	14.90	14.88
31	---	---	11.81	11.77	---	---	13.79	13.77	14.36	14.33	---	---
MONTH	12.55	9.61	11.81	10.13	12.98	11.80	13.79	12.98	14.36	13.79	14.90	14.36
YEAR	14.90	7.41										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--Md22-01. SITE ID.--385310075331301. PERMIT NUMBER.--10221.

LOCATION.--Lat 38°53'10", long 75°33'13", Hydrologic Unit 02040207, 2.4 mi west of Williamsville. Owner: Delaware Department of Transportation.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 17 ft; casing diameter 1 in., to 14 ft; well point from 14 to 17 ft.

INSTRUMENTATION.--Monthly water level measurements with electric or chalked steel tape by U.S. Geological Survey or Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 58 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

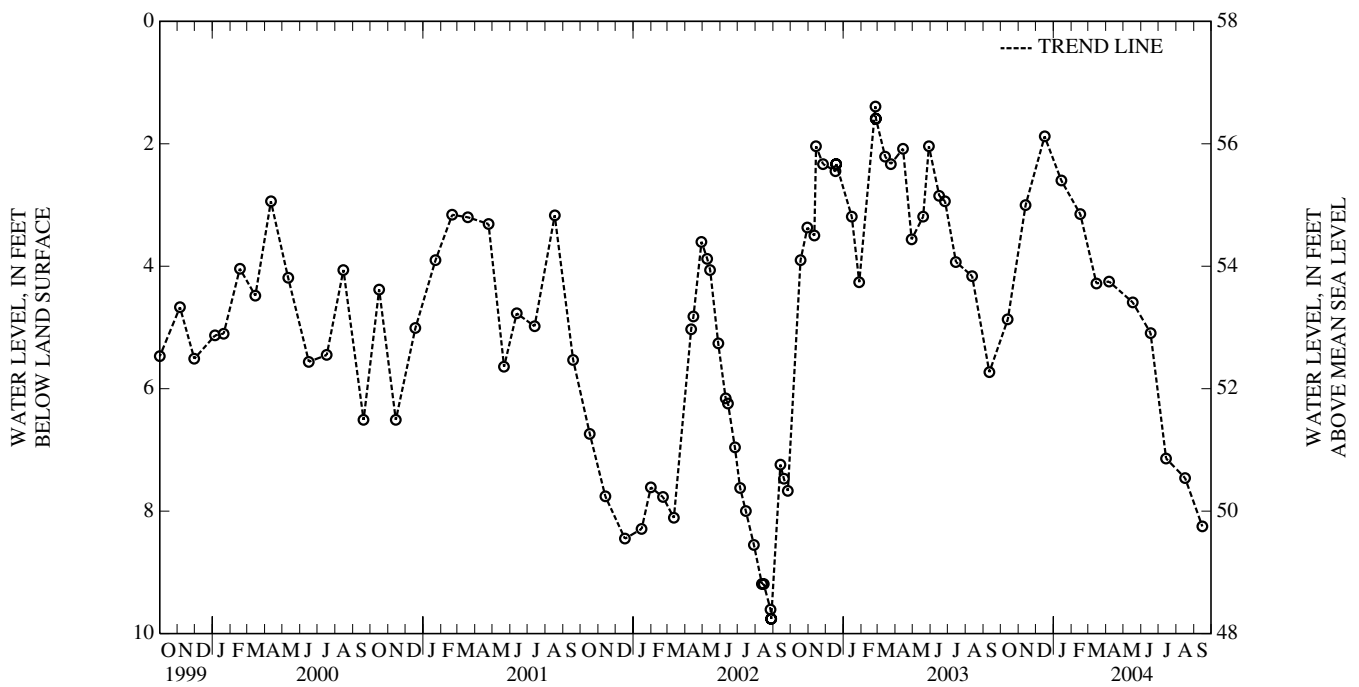
PERIOD OF RECORD.--September 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft below land surface, July 14, 1975; lowest measured, 11.14 ft below land surface, January 6, 1966.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	4.87	JAN 14, 2004	2.60	APR 06, 2004	4.25	JUL 14, 2004	7.14
NOV 13	3.00	FEB 16	3.15	MAY 17	4.59	AUG 16	7.46
DEC 16	1.88	MAR 15	4.28	JUN 17	5.09	SEP 15	8.25

HIGHEST 1.88 DEC 16, 2003
 LOWEST 8.25 SEP 15, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Db24-17. SITE ID.--393856075415602. PERMIT NUMBER.--65430.

LOCATION.--Lat 39°38'55", long 75°41'54", Hydrologic Unit 02040205, 2 mi south of Ogletown. Owner: Delaware Department of Transportation.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 22 ft; casing diameter 2 in., to 17 ft; screen diameter 2 in., from 17 to 22 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 77 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.55 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

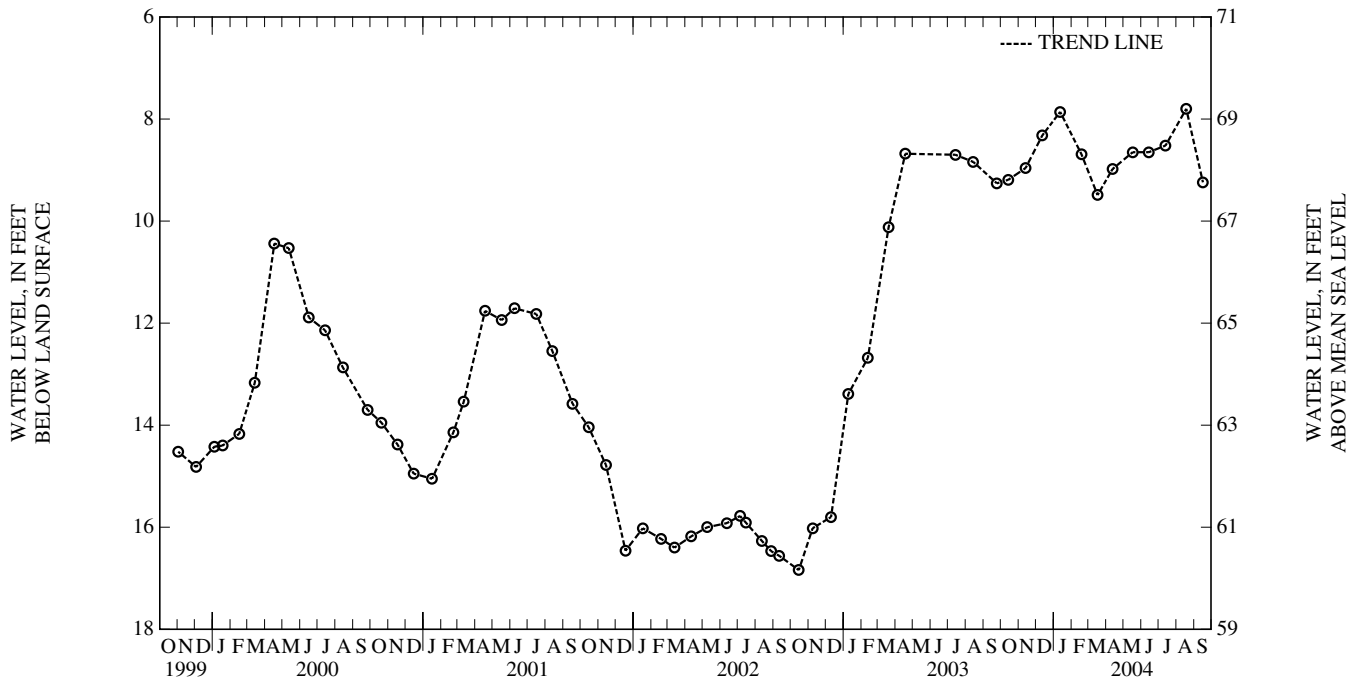
PERIOD OF RECORD.--June 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.42 ft below land surface, April 29, 1993; lowest measured, 16.84 ft below land surface, October 15, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	9.19	JAN 12, 2004	7.86	APR 12, 2004	8.98	JUL 13, 2004	8.52
NOV 13	8.96	FEB 18	8.69	MAY 17	8.65	AUG 18	7.80
DEC 12	8.32	MAR 17	9.49	JUN 14	8.65	SEP 16	9.24

HIGHEST 7.80 AUG 18, 2004
 LOWEST 9.49 MAR 17, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Db33-17. SITE ID.--393734075371103. PERMIT NUMBER--44612.

LOCATION.--Lat 39°37'34", long 75°37'11", Hydrologic Unit 02040205, off Salem Church Road, near Beck's Pond. Owner: U.S. Geological Survey.

AQUIFER.--Lower Potomac aquifer in the Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 189 ft; casing diameter 2 in., to 185 ft; screen diameter 2 in., from 185 to 189 ft. Installed in an 8 in. borehole with Db33-18 and Db33-19.

INSTRUMENTATION.--Twice yearly water level measurements with electric tape by U.S. Geological Survey personnel. Monthly water level measurements from October 1980 to November 1981.

DATUM.--Elevation of land surface is 48 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of coupling, 3.26 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

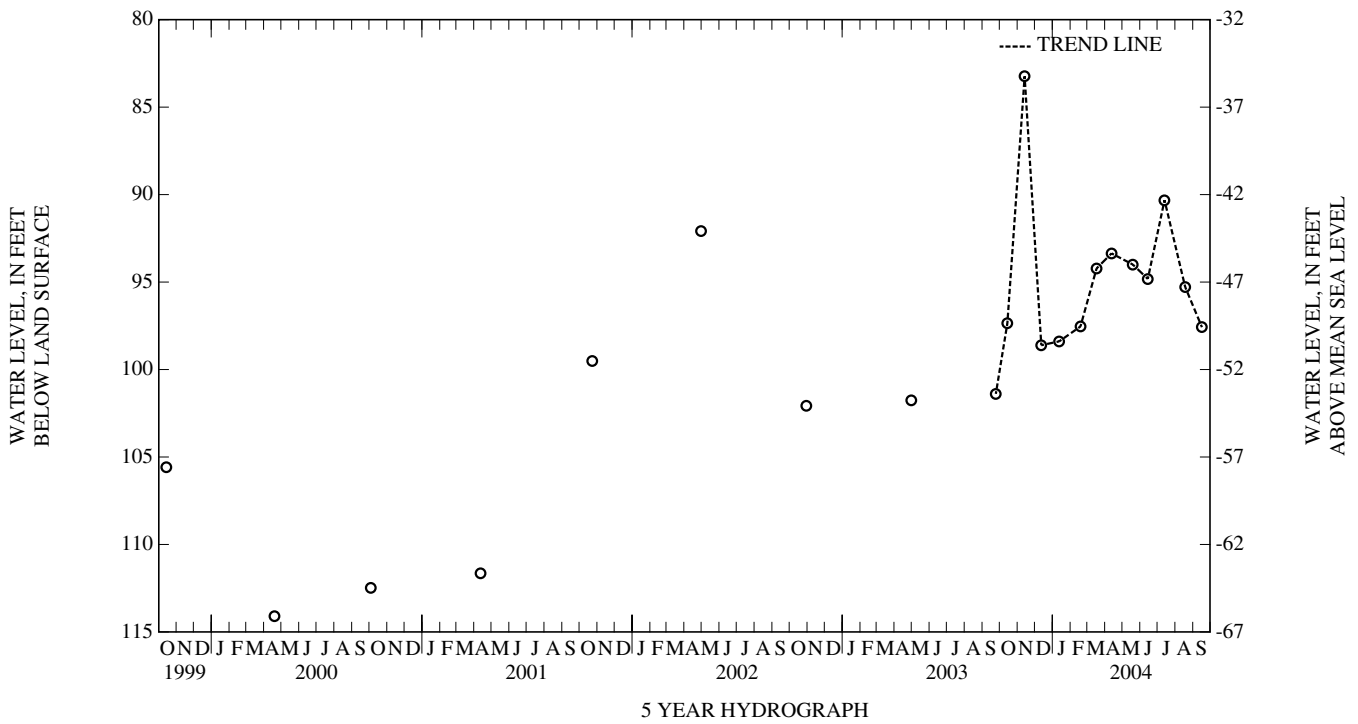
PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 83.24 ft below land surface, November 13, 2003; lowest measured, 115.82 ft below land surface, October 15, 1990.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	97.36	JAN 12, 2004	98.39	APR 12, 2004	93.36	JUL 13, 2004	90.32
NOV 13	83.24	FEB 18	97.54	MAY 19	94.00	AUG 18	95.29
DEC 12	98.61	MAR 17	94.22	JUN 14	94.82	SEP 16	97.58

HIGHEST 83.24 NOV 13, 2003
 LOWEST 98.61 DEC 12, 2003



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Db33-18. SITE ID.--393734075371102. PERMIT NUMBER--44612.

LOCATION.--Lat 39°37'34", long 75°37'11", Hydrologic Unit 02040205, off Salem Church Road, near Beck's Pond. Owner: U.S. Geological Survey.

AQUIFER.--Lower Potomac aquifer in the Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 143 ft; casing diameter 2 in., to 139 ft; screen diameter 2 in., from 139 to 143 ft. Installed in an 8 in. borehole with Db33-17 and Db33-19.

INSTRUMENTATION.--Twice yearly water level measurements with electric tape by U.S. Geological Survey personnel. Monthly water level measurements from October 1980 to November 1981.

DATUM.--Elevation of land surface is 48 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of coupling, 3.24 ft above land surface.

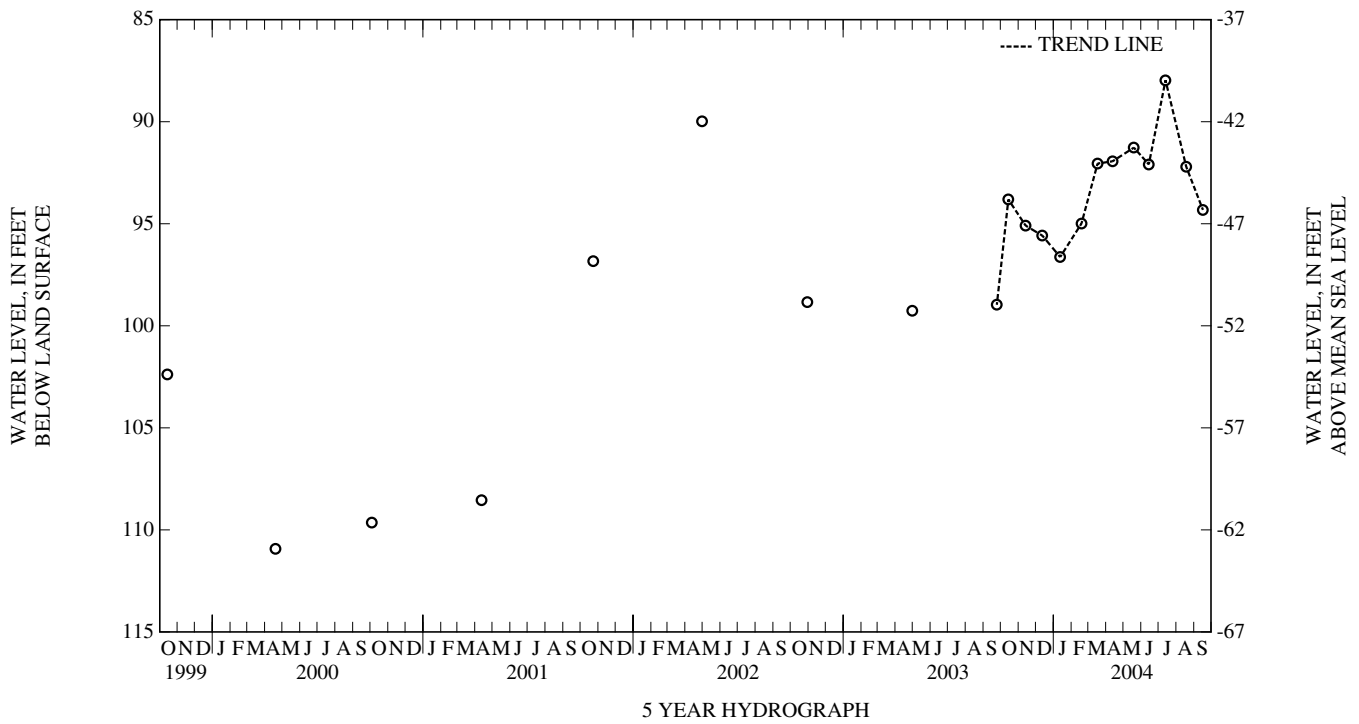
REMARKS.--Delaware Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 87.97 ft below land surface, July 13, 2004; lowest measured, 113.44 ft below land surface, October 15, 1990.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	93.81	JAN 12, 2004	96.63	APR 12, 2004	91.94	JUL 13, 2004	87.97
NOV 13	95.09	FEB 18	94.99	MAY 19	91.27	AUG 18	92.21
DEC 12	95.58	MAR 17	92.05	JUN 14	92.09	SEP 16	94.32
HIGHEST 87.97 JUL 13, 2004							
LOWEST 96.63 JAN 12, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Db33-19. SITE ID.--393734075371101. PERMIT NUMBER--44612.

LOCATION.--Lat 39°37'34", long 75°37'11", Hydrologic Unit 02040205, off Salem Church Road, near Beck's Pond. Owner: U.S. Geological Survey.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 39 ft; casing diameter 2 in.; to 35 ft; screen diameter 2 in., from 35 to 39 ft. Installed in an 8 in. borehole with Db33-17 and Db33-18.

INSTRUMENTATION.--Twice yearly water level measurements with electric tape by U.S. Geological Survey personnel. Monthly water level measurements from October 1980 to November 1981.

DATUM.--Elevation of land surface is 48 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of coupling, 3.29 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

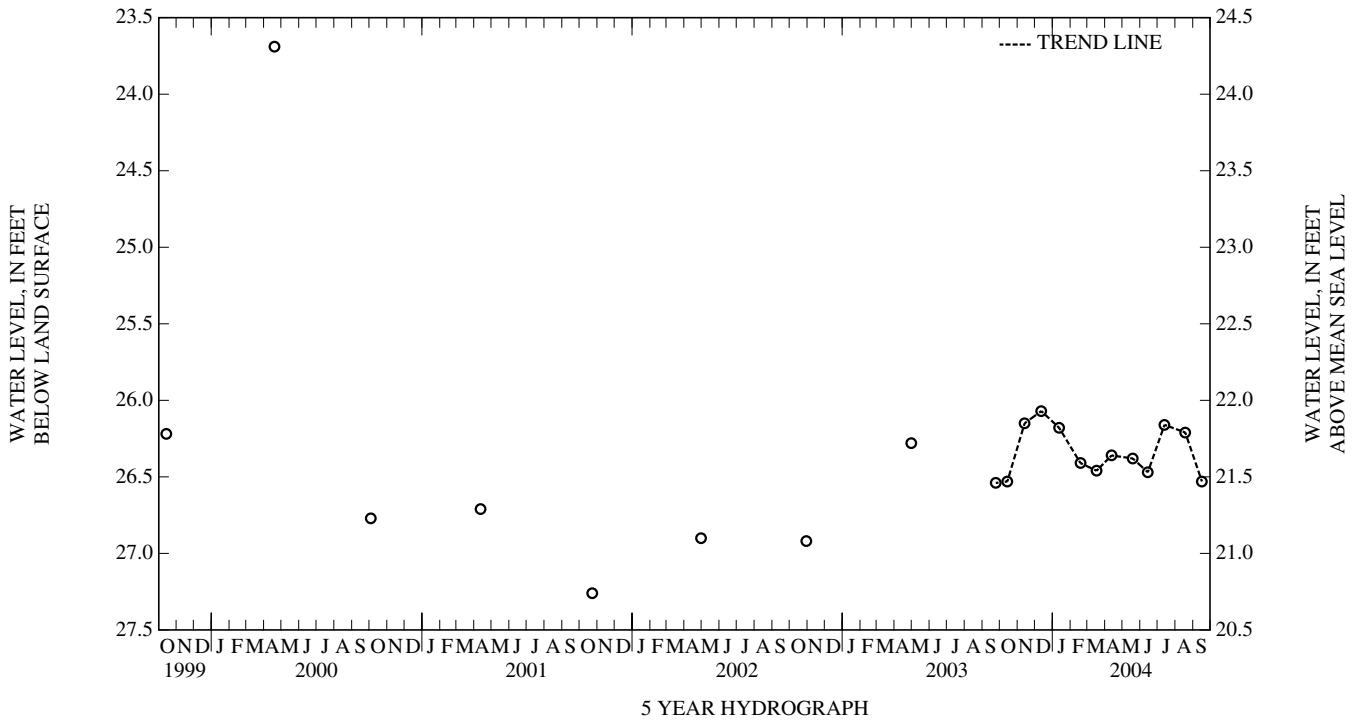
PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.69 ft below land surface, April 19, 2000; lowest measured 28.23 ft below land surface, April 3, 1981.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	26.53	JAN 12, 2004	26.18	APR 12, 2004	26.36	JUL 13, 2004	26.16
NOV 13	26.15	FEB 18	26.41	MAY 19	26.38	AUG 18	26.21
DEC 12	26.07	MAR 17	26.46	JUN 14	26.47	SEP 16	26.53

HIGHEST 26.07 DEC 12, 2003
 LOWEST 26.53 OCT 14, 2003 SEP 16, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Dc34-05. SITE ID.--393755075364801.

LOCATION.--Lat 39°37'55", long 75°36'48", Hydrologic Unit 02040205, east side of Rt. 9, at National Guard Rifle Range. Owner: U.S. Geological Survey.

AQUIFER.--Lower Potomac aquifer in the Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 579 ft; casing diameter 2 in., to 574 ft; screen diameter 2 in., from 574 to 579 ft.

INSTRUMENTATION.--Twice yearly water level measurements with electric tape by U.S. Geological Survey personnel. Monthly water level measurements from November 1975 to November 1981.

DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of coupling, 2.10 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

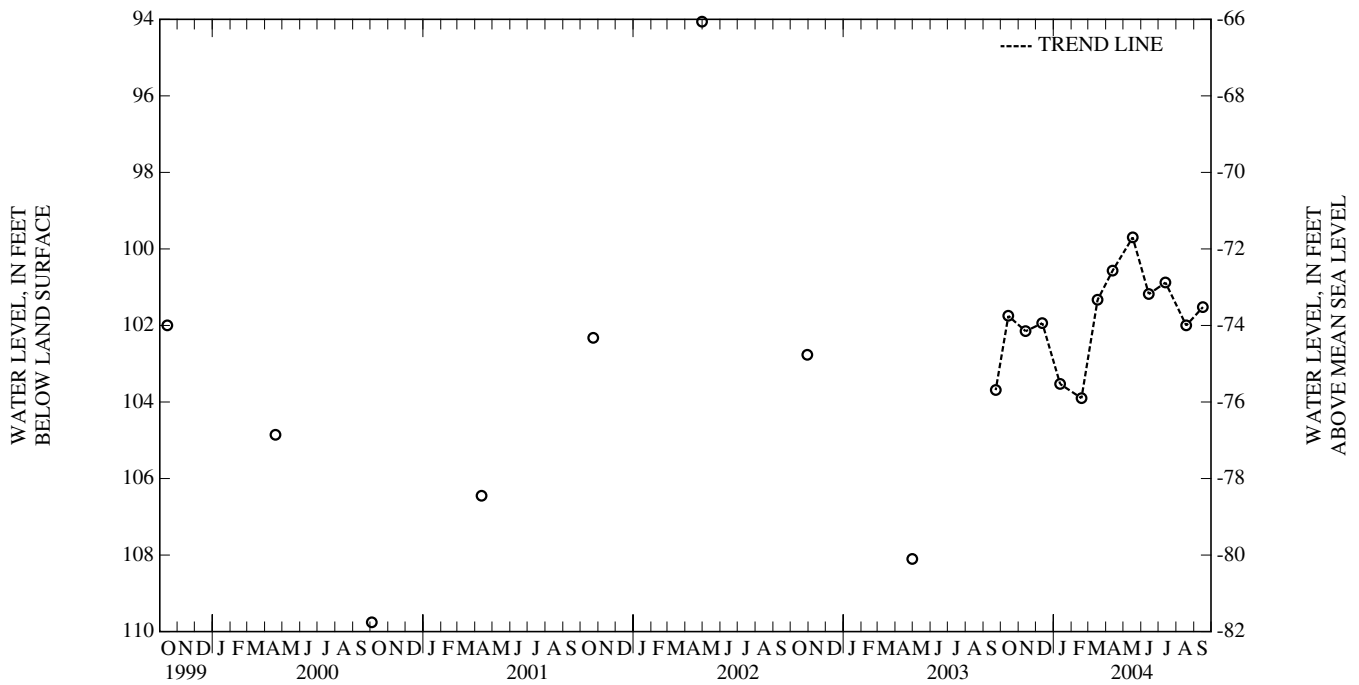
PERIOD OF RECORD.--November 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.38 ft below land surface, October 10, 1984; lowest measured, 130.62 ft below land surface, May 5, 1978.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	101.75	JAN 12, 2004	103.53	APR 12, 2004	100.57	JUL 13, 2004	100.88
NOV 13	102.15	FEB 18	103.90	MAY 17	99.70	AUG 18	102.00
DEC 12	101.94	MAR 17	101.33	JUN 14	101.18	SEP 16	101.52

HIGHEST 99.70 MAY 17, 2004
 LOWEST 103.90 FEB 18, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Dc34-06. SITE ID.--393755075364802.

LOCATION.--Lat 39°37'55", long 75°36'48", Hydrologic Unit 02040205, east side of Rt. 9, at National Guard Rifle Range. Owner: U.S. Geological Survey.

AQUIFER.--Upper Potomac aquifer in the Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 188 ft; casing diameter 2 in., to 183 ft; screened from 183 to 188 ft.

INSTRUMENTATION.--Twice yearly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from November 1975 to October 1982.

DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 6 in. casing, 2.00 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

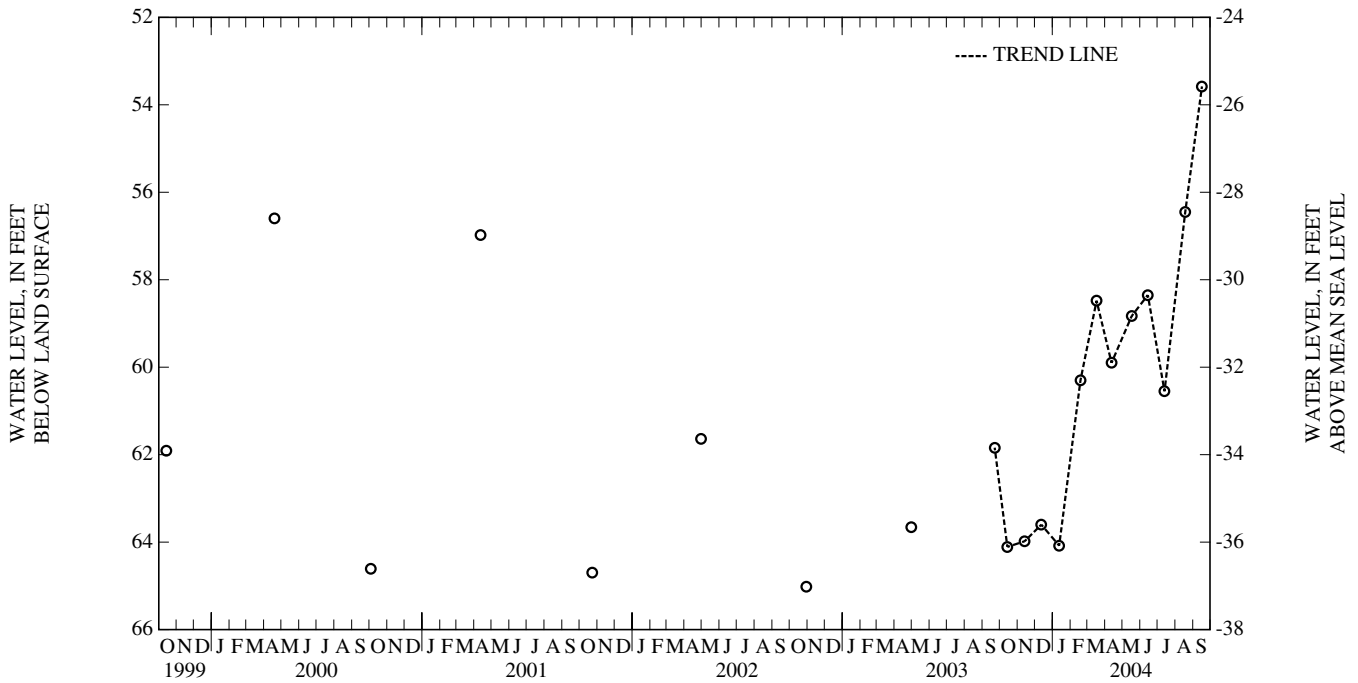
PERIOD OF RECORD.--November 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.94 ft below land surface, February 15, 1976; lowest measured, 65.02 ft below land surface, October 30, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	64.11	JAN 12, 2004	64.08	APR 12, 2004	59.90	JUL 13, 2004	60.55
NOV 13	63.98	FEB 18	60.30	MAY 17	58.83	AUG 18	56.45
DEC 12	63.60	MAR 17	58.48	JUN 14	58.35	SEP 16	53.58

HIGHEST 53.58 SEP 16, 2004
 LOWEST 64.11 OCT 14, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Eb23-22. SITE ID.--393316075421601.

LOCATION.--Lat 39°33'16", long 75°42'16", Hydrologic Unit 02040205, at Lums Pond State Park. Owner: U.S. Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code : 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 105 ft; casing diameter 2 in., to 101 ft, screen diameter 2 in., from 101 to 105 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

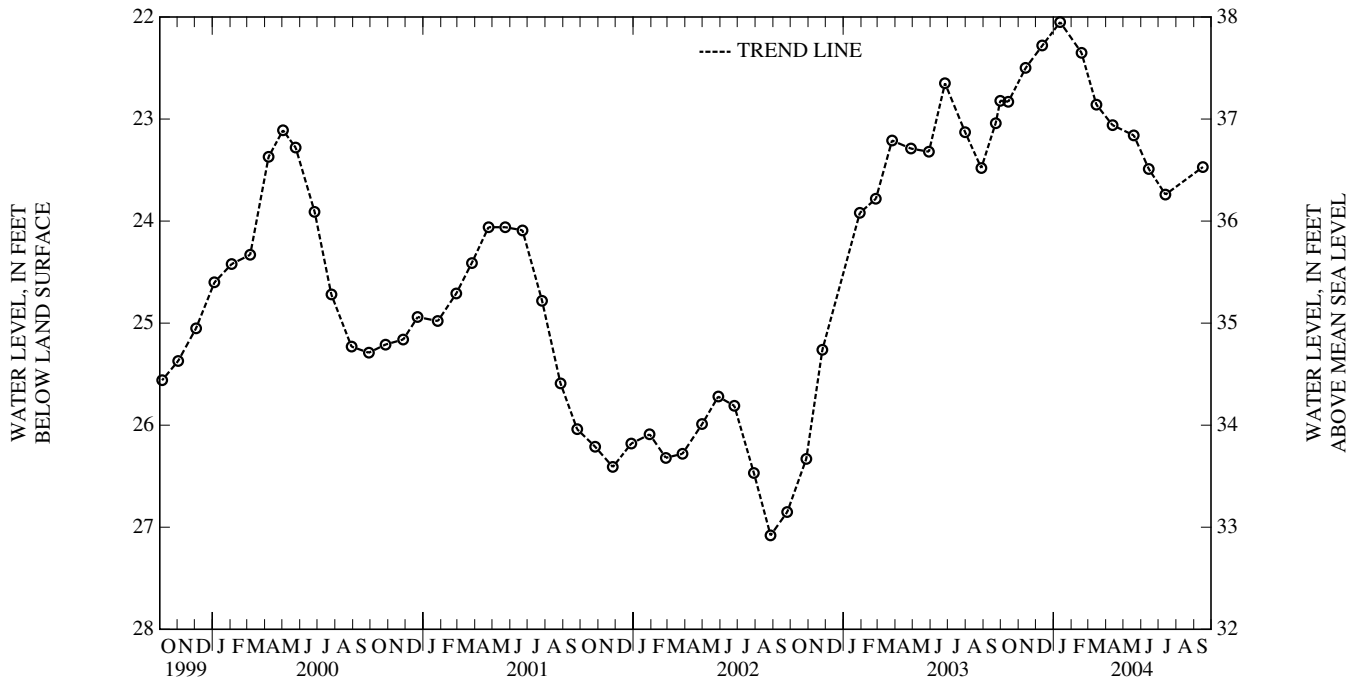
PERIOD OF RECORD.--November 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.05 ft below land surface, January 12, 2004; lowest measured, 27.42 ft below land surface, October 2, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	22.83	JAN 12, 2004	22.05	APR 12, 2004	23.06	JUL 13, 2004	23.74
NOV 13	22.50	FEB 18	22.35	MAY 19	23.16	SEP 16	23.47
DEC 12	22.28	MAR 15	22.86	JUN 14	23.49		

HIGHEST 22.05 JAN 12, 2004
 LOWEST 23.74 JUL 13, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Eb23-23. SITE ID.--393316075421602.

LOCATION.--Lat 39°33'16", long 75°42'16", Hydrologic Unit 02040205, at Lums Pond State Park. Owner: U.S. Geological Survey.

AQUIFER.--Upper Potomac aquifer in the Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 292 ft; casing diameter 2 in., to 288 ft, screen diameter 2 in., from 288 to 292 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.35 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

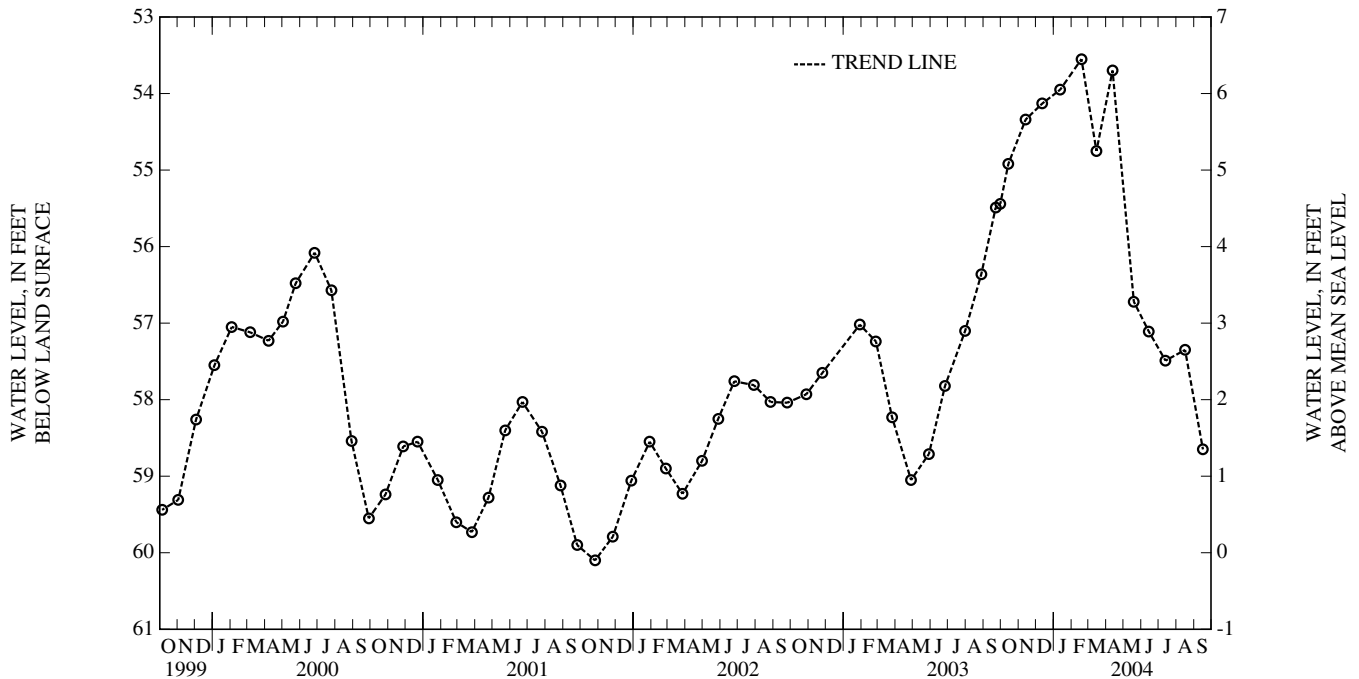
PERIOD OF RECORD.--November 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 52.38 ft below land surface, October 12, 1982; lowest measured, 60.60 ft below land surface, June 3, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	54.92	JAN 12, 2004	53.95	APR 12, 2004	53.70	JUL 13, 2004	57.49
NOV 13	54.34	FEB 18	53.55	MAY 19	56.72	AUG 16	57.35
DEC 12	54.13	MAR 15	54.75	JUN 14	57.11	SEP 16	58.65

HIGHEST 53.55 FEB 18, 2004
 LOWEST 58.65 SEP 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Eb23-24. SITE ID.--393316075421603.

LOCATION.--Lat 39°33'16", long 75°42'16", Hydrologic Unit 02040205, at Lums Pond State Park. Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer in the Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 436 ft; casing diameter 2 in., to 432 ft, screen diameter 2 in., from 432 to 436 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.38 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. Water-levels are affected by local and regional ground-water withdrawal.

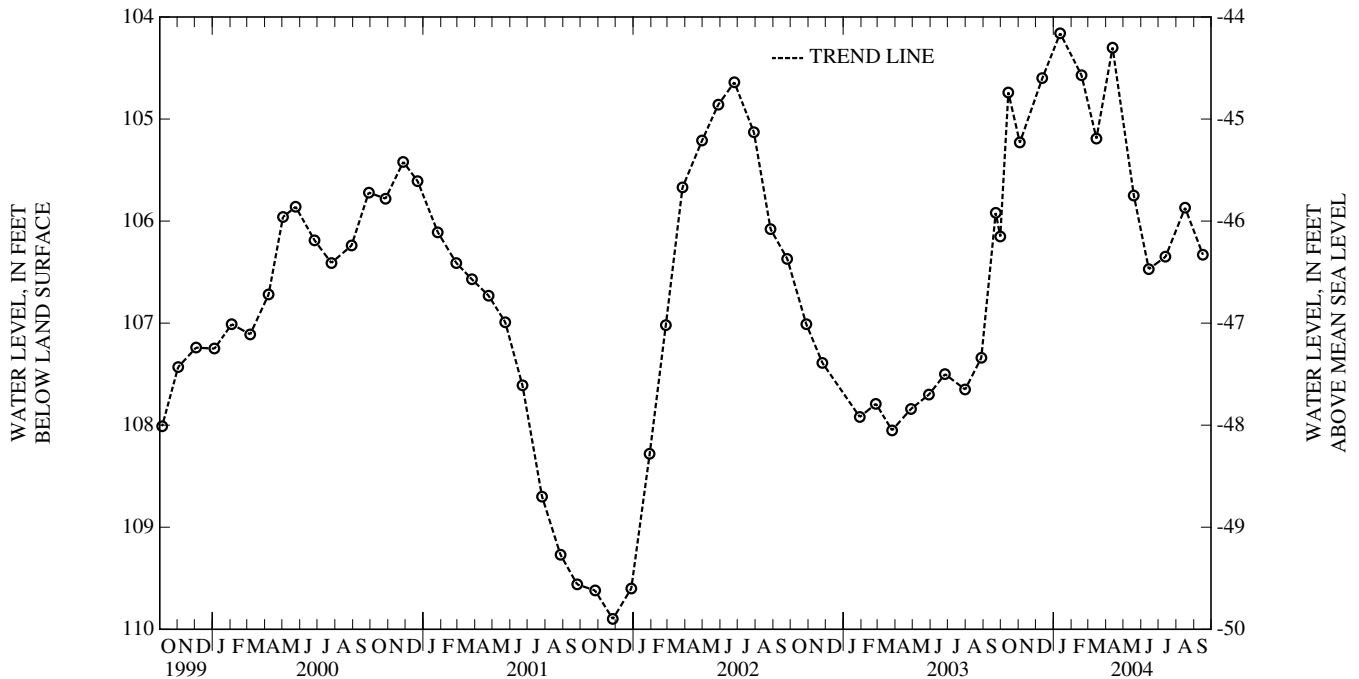
PERIOD OF RECORD.--November 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.17 ft below land surface, November 13, 1980; lowest measured, 109.90 ft below land surface, November 26, 2001.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	104.74	JAN 12, 2004	104.16	APR 12, 2004	104.30	JUL 13, 2004	106.35
NOV 03	105.23	FEB 18	104.57	MAY 19	105.75	AUG 16	105.87
DEC 12	104.60	MAR 15	105.19	JUN 14	106.47	SEP 16	106.33

HIGHEST 104.16 JAN 12, 2004
 LOWEST 106.47 JUN 14, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Hb14-01. SITE ID.--391949075410701.

LOCATION.--Lat 39°19'49", long 75°41'07", Hydrologic Unit 02040205, at Prices Corners. Owner: Delaware Department of Transportation.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 1 in., to 15.6 ft; well point from 15.6 to 18.6 ft.

INSTRUMENTATION.--Monthly water level measurements with electric or chalked steel tape by U.S. Geological Survey or Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

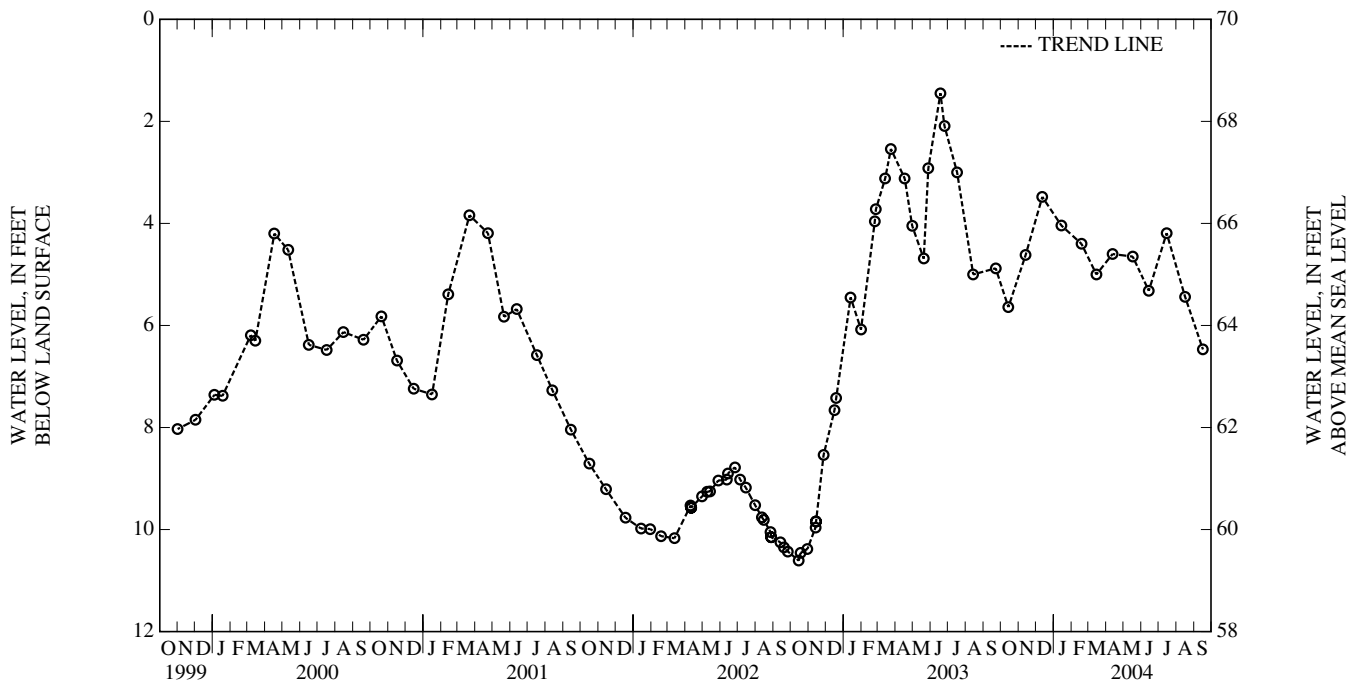
PERIOD OF RECORD.--October 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.45 ft below land surface, June 18, 2003; lowest measured, 11.95 ft below land surface, August 31, 1966.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	5.64	JAN 14, 2004	4.04	APR 12, 2004	4.60	JUL 15, 2004	4.19
NOV 13	4.62	FEB 18	4.40	MAY 17	4.65	AUG 16	5.44
DEC 12	3.48	MAR 15	5.00	JUN 14	5.32	SEP 16	6.47

HIGHEST 3.48 DEC 12, 2003
 LOWEST 6.47 SEP 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY

WELL NUMBER.--Nc45-01. SITE ID.--384639075353101. PERMIT NUMBER.--10226.

LOCATION.--Lat 38°46'39", long 75°35'31", Hydrologic Unit 02060008, 2.0 mi south of Greenwood. Owner: Private Residence.

AQUIFER.--Columbia Formation (Staytonville unit) of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 15.45 ft; casing diameter 1 in., to 12.95 ft; screened from 12.95 to 15.45 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 43 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

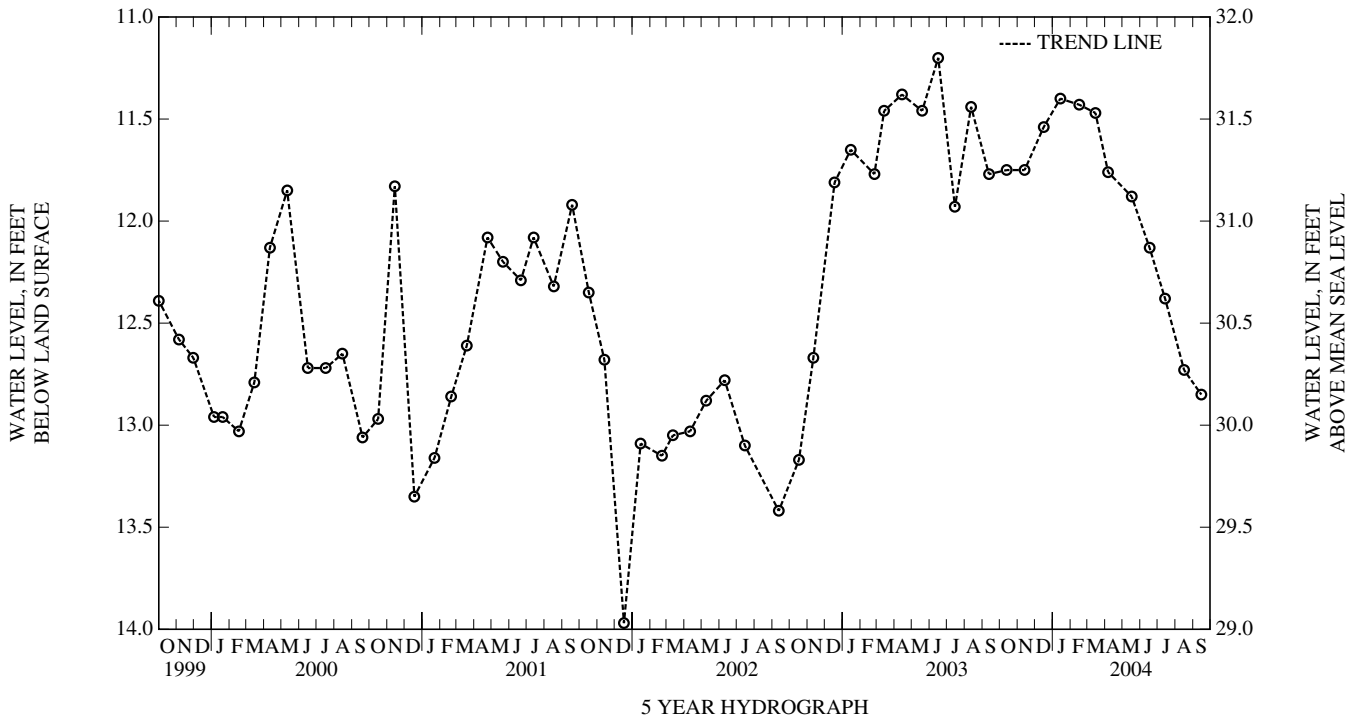
PERIOD OF RECORD.--January 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.82 ft below land surface, April 9, 1958; lowest measured, 14.66 ft below land surface, December 11, 1978.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	11.75	JAN 14, 2004	11.40	APR 06, 2004	11.76	JUL 14, 2004	12.38
NOV 13	11.75	FEB 16	11.43	MAY 17	11.88	AUG 16	12.73
DEC 16	11.54	MAR 15	11.47	JUN 17	12.13	SEP 15	12.85

HIGHEST 11.40 JAN 14, 2004
 LOWEST 12.85 SEP 15, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Nf51-02. SITE ID.--384504075242602. PERMIT NUMBER.--95733.

LOCATION.--Lat 38°45'04", long 75°24'26", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 53 ft; casing diameter 2 in., to 50 ft; screen diameter 2 in., screened from 50 to 53 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 1.91 ft above land surface.

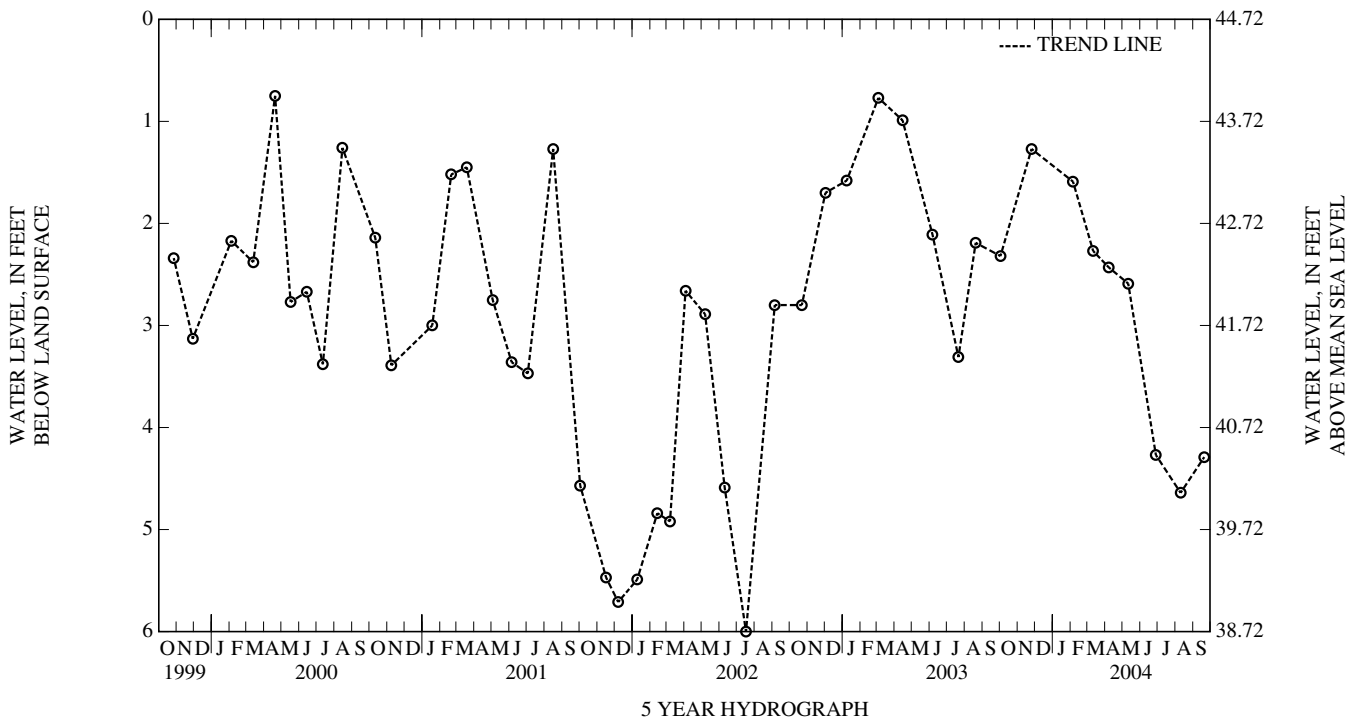
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft below land surface, February 25, 1998; lowest measured, 7.38 ft below land surface, September 30, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.32	MAR 11, 2004	2.27	JUN 28, 2004	4.27
NOV 25	1.27	APR 07	2.43	AUG 10	4.64
FEB 05, 2004	1.59	MAY 11	2.59	SEP 20	4.29
HIGHEST	1.27	NOV 25, 2003			
LOWEST	4.64	AUG 10, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Nf51-03. SITE ID.--384504075242601. PERMIT NUMBER.--95750.

LOCATION.--Lat 38°45'04", long 75°24'26", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18 ft; casing diameter 2 in., to 15 ft; screen diameter 2 in., screened from 15 to 18 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44.71 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.23 ft above land surface.

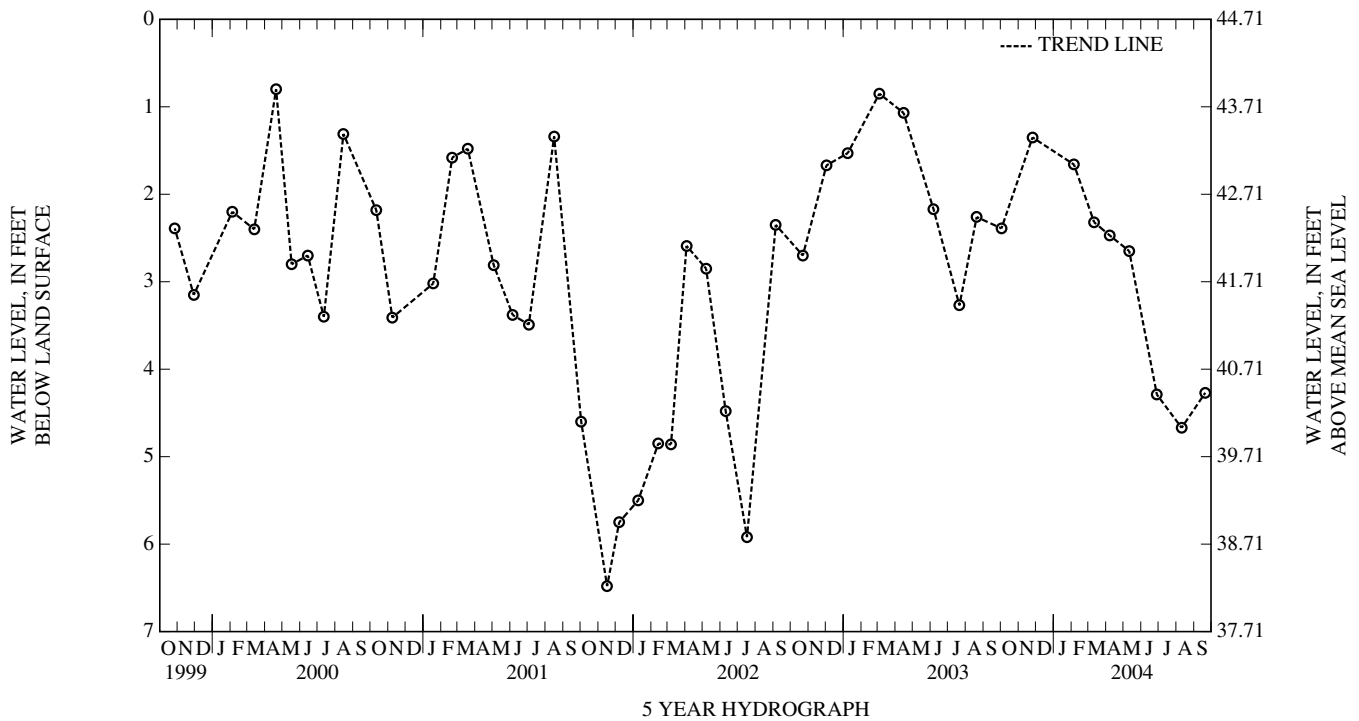
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.32 ft below land surface, February 25, 1998; lowest measured, 6.72 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.39	MAR 11, 2004	2.32	JUN 28, 2004	4.29
NOV 25	1.35	APR 07	2.47	AUG 10	4.67
FEB 05, 2004	1.66	MAY 11	2.65	SEP 20	4.27
HIGHEST	1.35	NOV 25, 2003			
LOWEST	4.67	AUG 10, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY—Continued

WELL NUMBER.--Nf51-04. SITE ID.--384504075242603. PERMIT NUMBER.--95747.

LOCATION.--Lat 38°45'04", long 75°24'26", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 80 ft; casing diameter 2 in., to 77 ft; screen diameter 2 in., screened from 77 to 80 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44.52 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.30 ft above land surface.

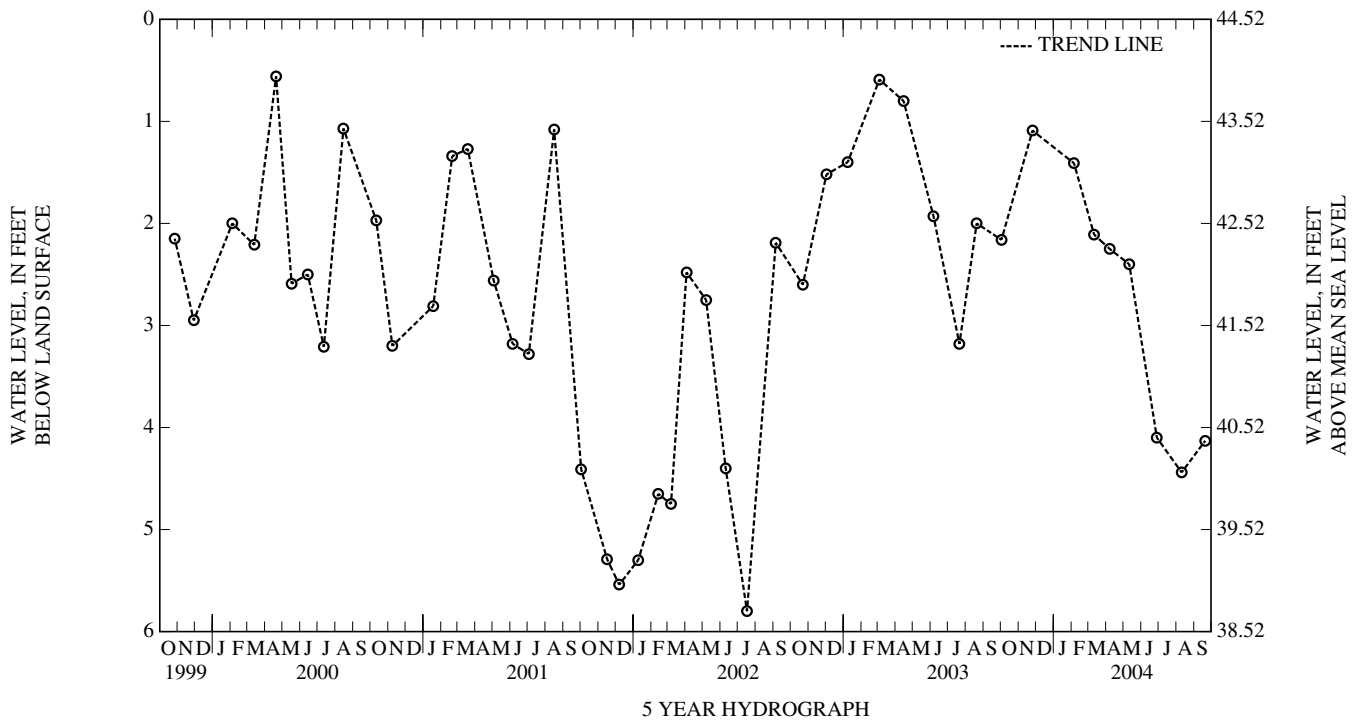
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.06 ft below land surface, February 25, 1998; lowest measured, 6.53 ft below land surface, October 26, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.16	MAR 11, 2004	2.11	JUN 28, 2004	4.10
NOV 25	1.09	APR 07	2.25	AUG 10	4.44
FEB 05, 2004	1.41	MAY 11	2.40	SEP 20	4.13
HIGHEST	1.09	NOV 25, 2003			
LOWEST	4.44	AUG 10, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Ngll-01. SITE ID.--384955075192801. PERMIT NUMBER.--10227.

LOCATION.--Lat 38°49'55", long 75°19'28", Hydrologic Unit 02040207, 1.2 mi east of Jefferson Crossroads. Owner: Delaware Department of Transportation. AQUIFER.--Omar Formation of Pleistocene age. Aquifer code: 112OMAR.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 1 in., to 16 ft; screened from 16 to 19 ft.

INSTRUMENTATION.--Monthly water level measurements with electric or chalked steel tape by U.S. Geological Survey or Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 24 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

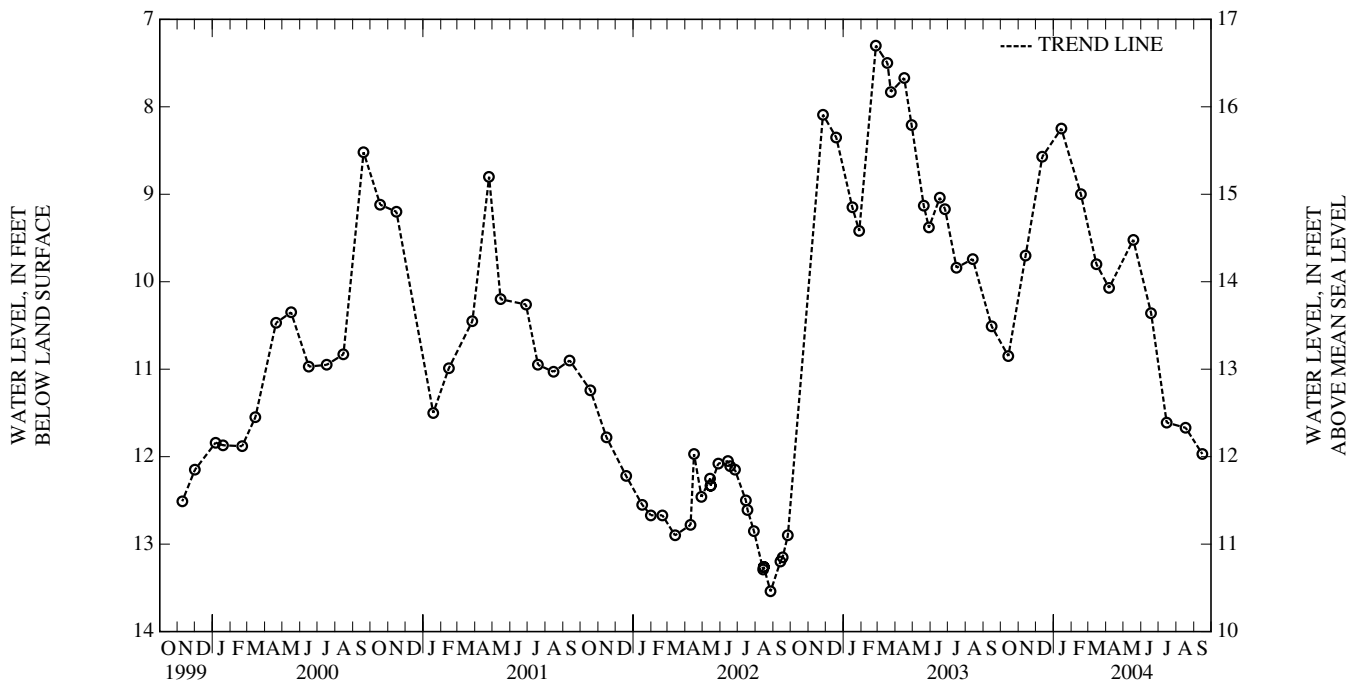
PERIOD OF RECORD.--September 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.91 ft below land surface, April 10, 1984; lowest measured, 14.64 ft below land surface, January 7, 1966.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2003	10.85	JAN 14, 2004	8.25	APR 06, 2004	10.07	JUL 15, 2004	11.61
NOV 13	9.70	FEB 17	9.00	MAY 18	9.52	AUG 17	11.67
DEC 12	8.57	MAR 15	9.80	JUN 18	10.36	SEP 15	11.97

HIGHEST 8.25 JAN 14, 2004
 LOWEST 11.97 SEP 15, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Ni52-11. SITE ID.--384558075083501. PERMIT NUMBER.--057363.

LOCATION.--Lat 38°45'58", long 75°08'35", Hydrologic Unit 02040207, in Lewes Library Park, near railroad tracks. Owner: Town of Lewes.

AQUIFER.--Pocomoke aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 155 ft; casing diameter 4 in., to 145 ft; screened from 145 to 155 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Intermittent water level measurements from May 1985 to July 1987. Twice yearly water level measurements from February 1988 to January 1992.

DATUM.--Elevation of land surface is 16 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 0.5 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

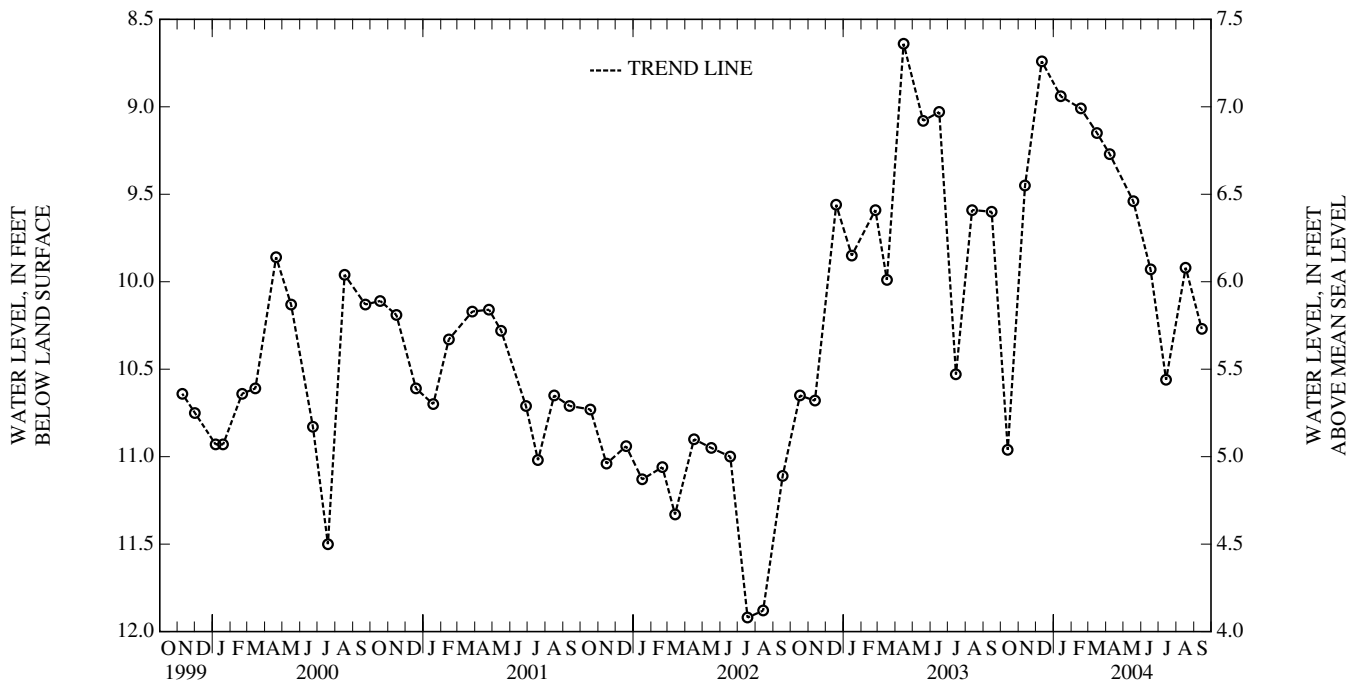
PERIOD OF RECORD.-- May 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.16 ft below land surface, March 4, 1998; lowest measured, 11.92 ft below land surface, July 18, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	10.96	JAN 13, 2004	8.94	APR 07, 2004	9.27	JUL 14, 2004	10.56
NOV 12	9.45	FEB 17	9.01	MAY 18	9.54	AUG 17	9.92
DEC 11	8.74	MAR 16	9.15	JUN 17	9.93	SEP 14	10.27

HIGHEST 8.74 DEC 11, 2003
 LOWEST 10.96 OCT 13, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Ni52-12. SITE ID.--384558075083502. PERMIT NUMBER.--057365.

LOCATION.--Lat 38°45'58", long 75°08'35", Hydrologic Unit 02040207, in Lewes Library Park, near railroad tracks. Owner: Town of Lewes.

AQUIFER.--Columbia Formation (Delaware Bay deposits) of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 80 ft; casing diameter 2 in., to 70 ft; screened from 70 to 80 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Intermittent water level measurements from July 1986 to July 1987. Twice yearly water level measurements from February 1988 to January 1992. Water level measurements from 1986 to 1992, measured by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 16 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 6 in. casing at land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

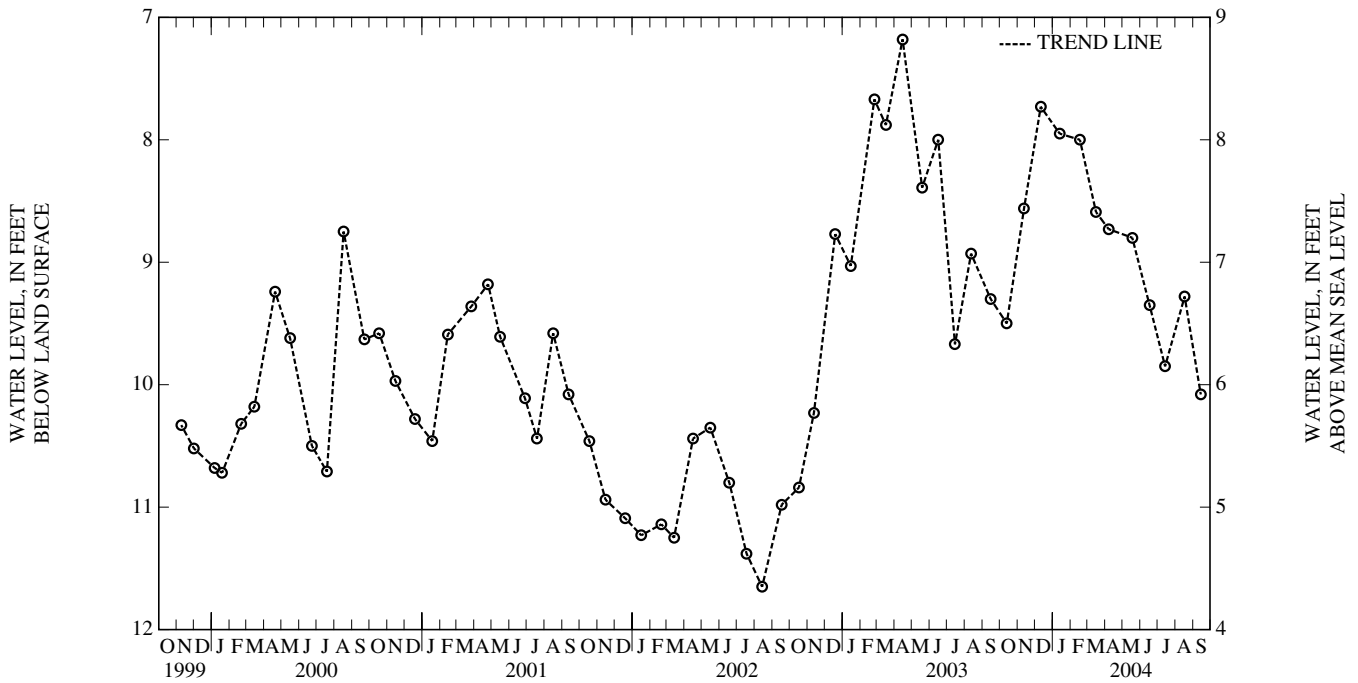
PERIOD OF RECORD.--July 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.57 ft below land surface, March 31, 1994; lowest measured, 11.70 ft below land surface, November 20, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	9.50	JAN 13, 2004	7.95	APR 07, 2004	8.73	JUL 14, 2004	9.85
NOV 12	8.56	FEB 17	8.00	MAY 18	8.80	AUG 17	9.28
DEC 11	7.73	MAR 16	8.59	JUN 17	9.35	SEP 14	10.08

HIGHEST 7.73 DEC 11, 2003
 LOWEST 10.08 SEP 14, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-03. SITE ID.--384418075231102. PERMIT NUMBER.--97464.

LOCATION.--Lat 38°44'18", long 75°23'11", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 35 ft; casing diameter 2 in., to 32 ft; screen diameter 2 in., screened from 32 to 35 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 49.09 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.36 ft above land surface.

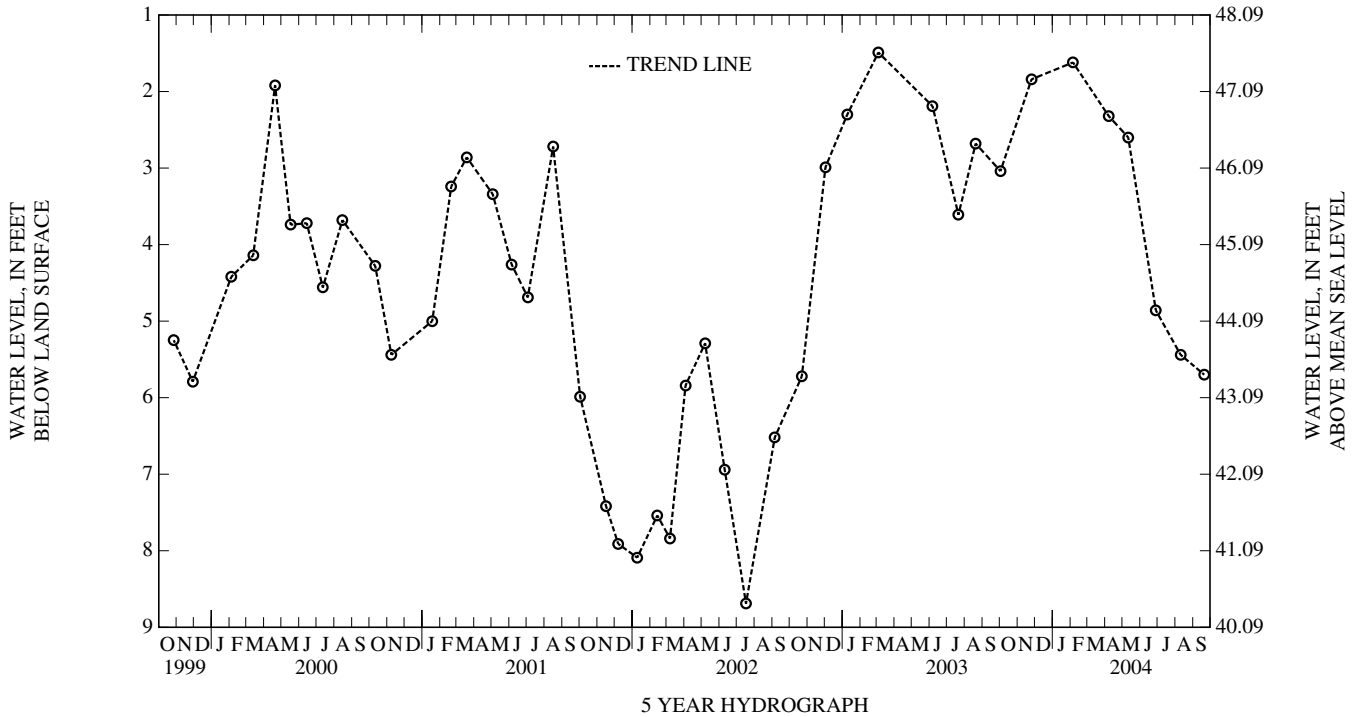
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.42 ft below land surface, February 25, 1998; lowest measured, 9.34 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	3.04	FEB 05, 2004	1.62	MAY 11, 2004	2.60	AUG 10, 2004	5.44
NOV 25	1.84	APR 07	2.32	JUN 28	4.86	SEP 20	5.70
HIGHEST	1.62	FEB 05, 2004					
LOWEST	5.70	SEP 20, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-04. SITE ID.--384418075231103. PERMIT NUMBER.--97467.

LOCATION.--Lat 38°44'18", long 75°23'11", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 77 ft; casing diameter 2 in., to 74 ft; screen diameter 2 in., screened from 74 to 77 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.32 ft above land surface.

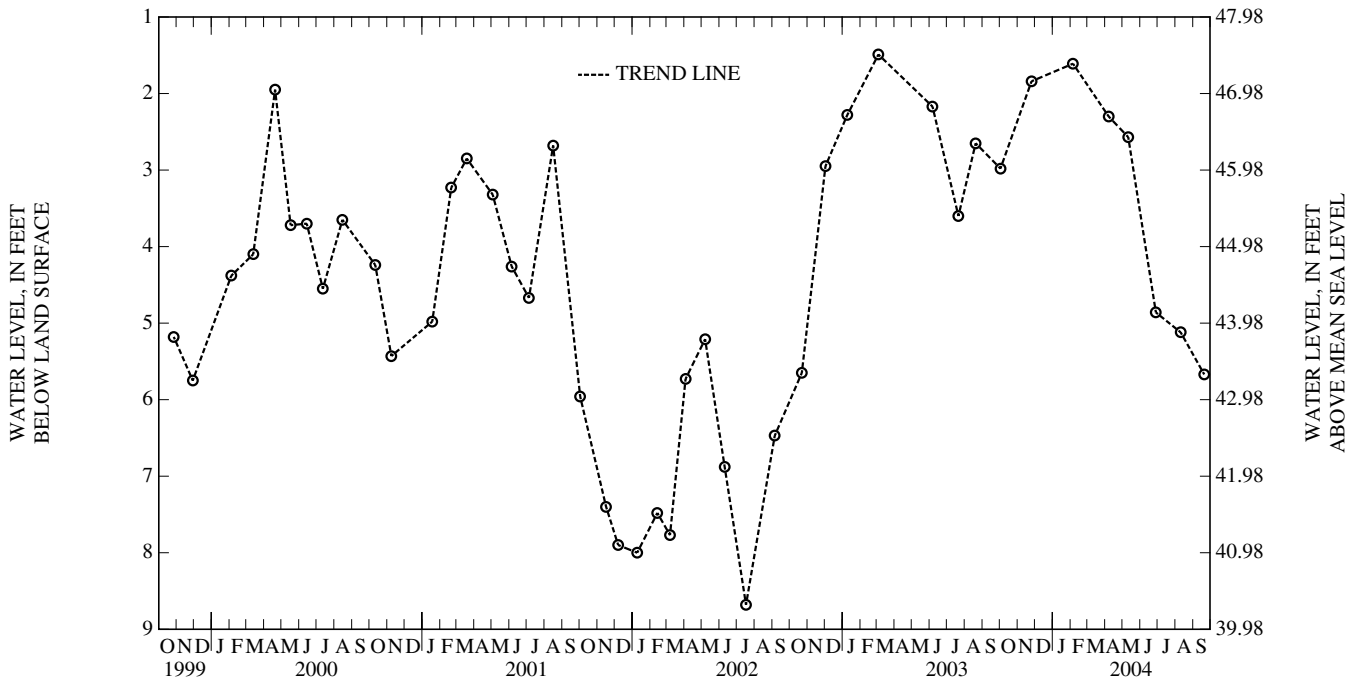
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.46 ft below land surface, April 4, 1994, and February 25, 1998; lowest measured, 9.28 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.98	FEB 05, 2004	1.61	MAY 11, 2004	2.57	AUG 10, 2004	5.12
NOV 25	1.84	APR 07	2.30	JUN 28	4.86	SEP 20	5.67
HIGHEST	1.61	FEB 05, 2004					
LOWEST	5.67	SEP 20, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-05. SITE ID.--384418075231101. PERMIT NUMBER.--97471.

LOCATION.--Lat 38°44'18", long 75°23'11", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 13 ft; casing diameter 2 in., to 10 ft; screen diameter 2 in., screened from 10 to 13 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 49.13 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.4 ft above land surface.

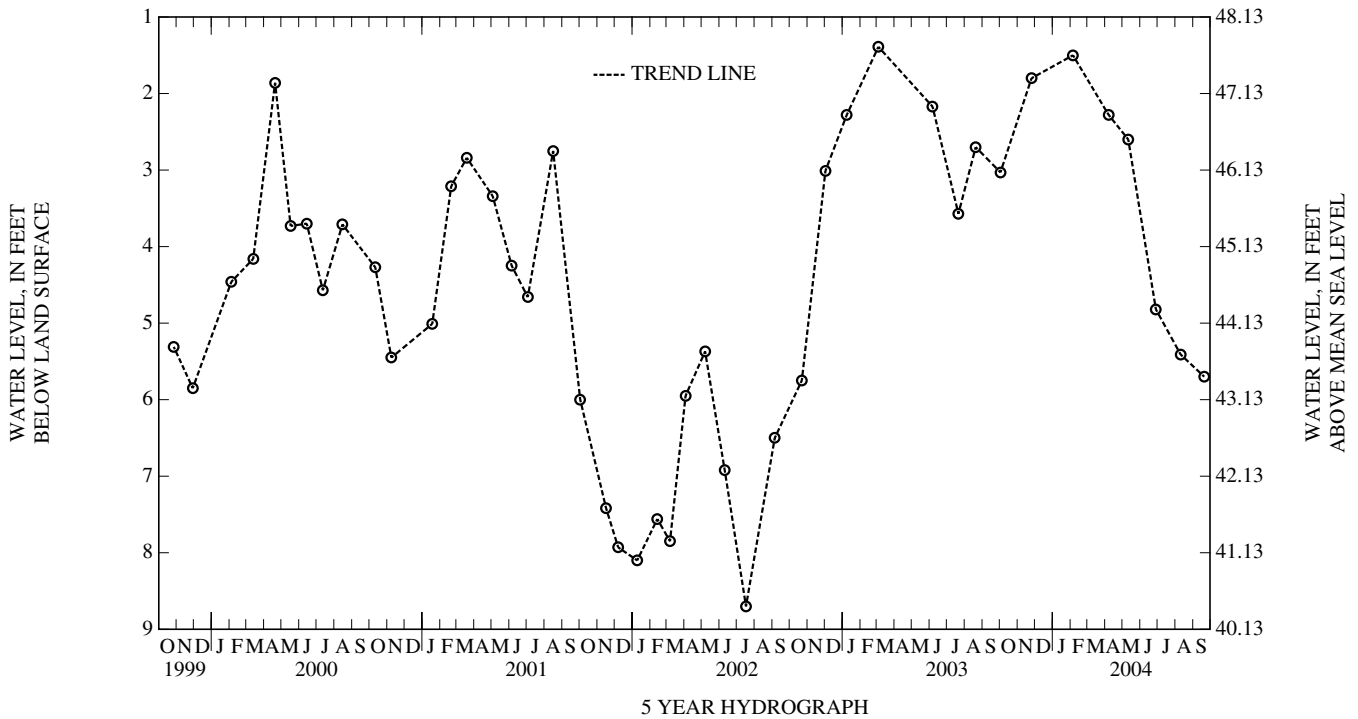
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.29 ft below land surface, February 25, 1998; lowest measured, 9.37 ft below land surface, October, 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	3.03	FEB 05, 2004	1.50	MAY 11, 2004	2.60	AUG 10, 2004	5.41
NOV 25	1.80	APR 07	2.28	JUN 28	4.82	SEP 20	5.70
HIGHEST	1.50	FEB 05, 2004					
LOWEST	5.70	SEP 20, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY—Continued

WELL NUMBER.--Of12-06. SITE ID.--384433075234901. PERMIT NUMBER.--97472.

LOCATION.--Lat 38°44'33", long 75°23'49", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.50 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.24 ft above land surface.

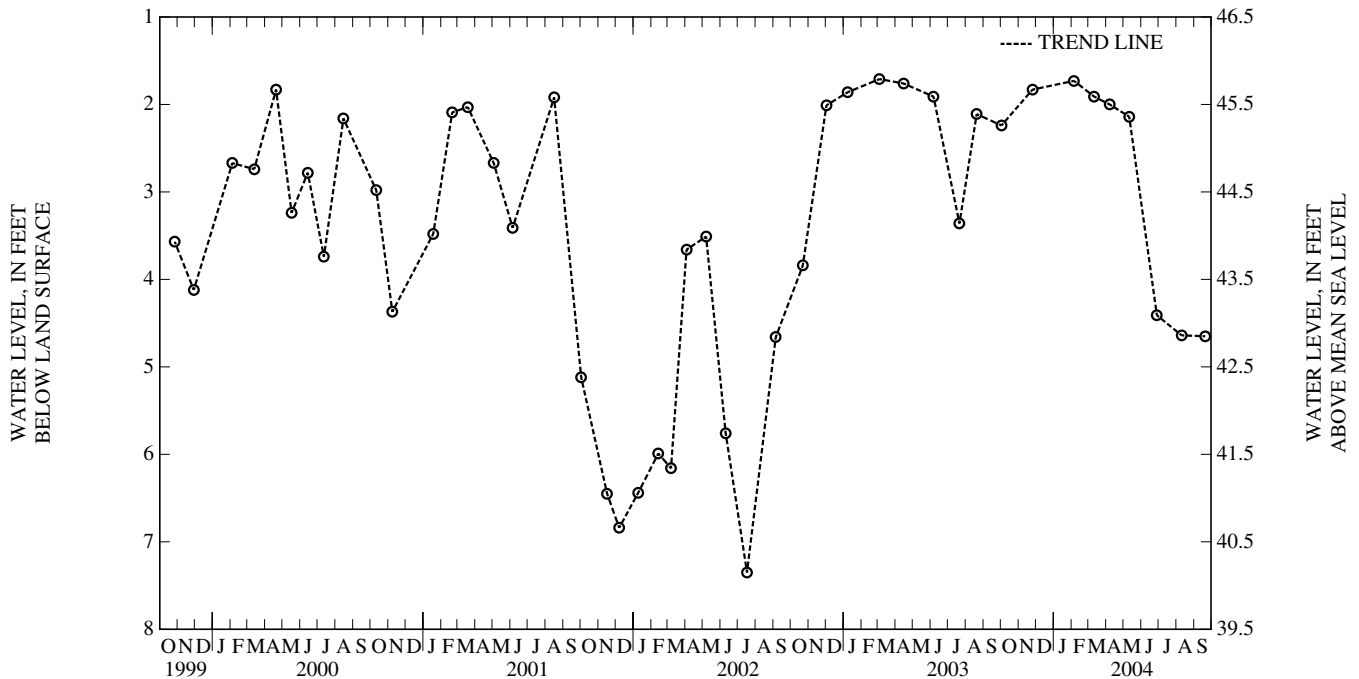
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.62 ft below land surface, February 5, 1998; lowest measured, 8.07 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.24	MAR 11, 2004	1.91	JUN 28, 2004	4.41
NOV 25	1.83	APR 07	2.00	AUG 10	4.64
FEB 05, 2004	1.73	MAY 11	2.14	SEP 20	4.65
HIGHEST 1.73 FEB 05, 2004					
LOWEST 4.65 SEP 20, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-07. SITE ID.--384435075234901. PERMIT NUMBER.--95736.

LOCATION.--Lat 38°44'35", long 75°23'49", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.13 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.27 ft above land surface.

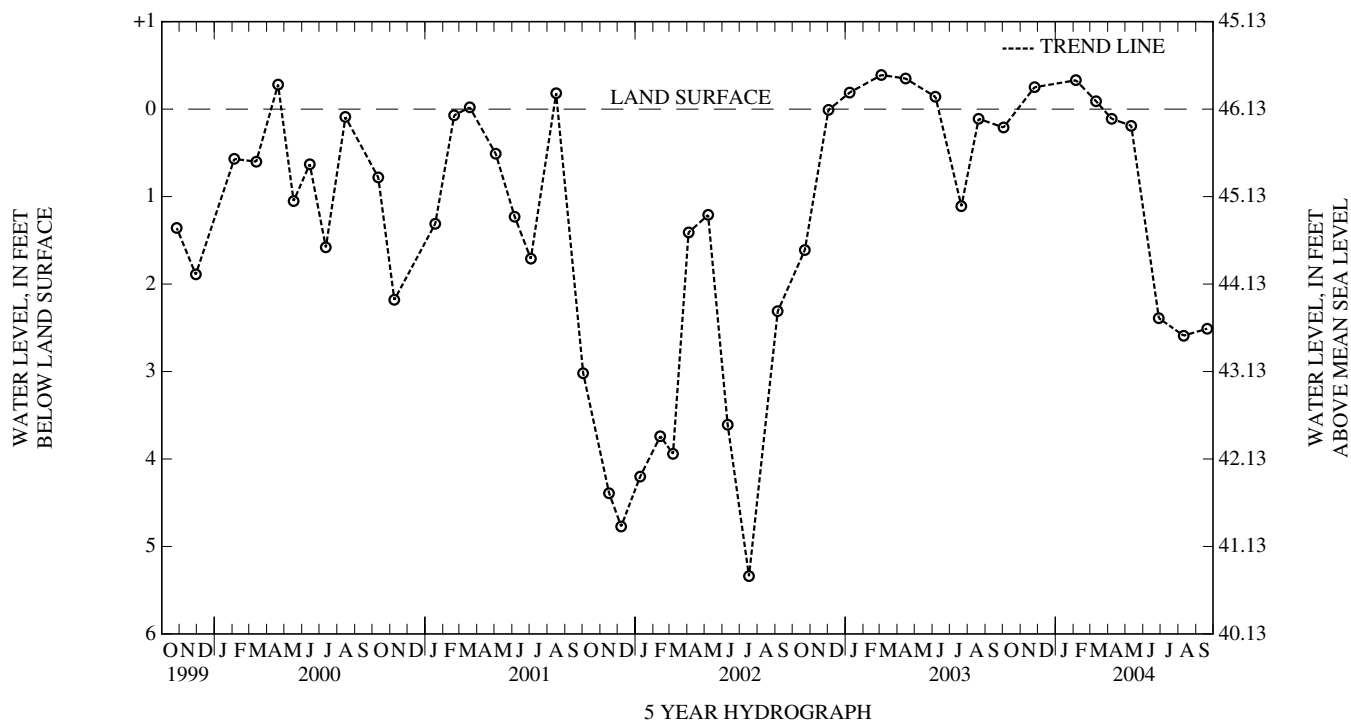
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.48 ft above land surface, February 25, 1998; lowest measured, 6.72 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.21	MAR 11, 2004	+.09	JUN 28, 2004	2.39
NOV 25	+.25	APR 07	.11	AUG 10	2.59
FEB 05, 2004	+.33	MAY 11	.19	SEP 20	2.51
HIGHEST	+.33	FEB 05, 2004			
LOWEST	2.59	AUG 10, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY—Continued

WELL NUMBER.--Of12-09. SITE ID.--384436075234801. PERMIT NUMBER.--95751.

LOCATION.--Lat 38°44'36", long 75°23'48", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 13 ft; casing diameter 2 in., to 10 ft; screen diameter 2 in., screened from 10 to 13 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.13 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.34 ft above land surface.

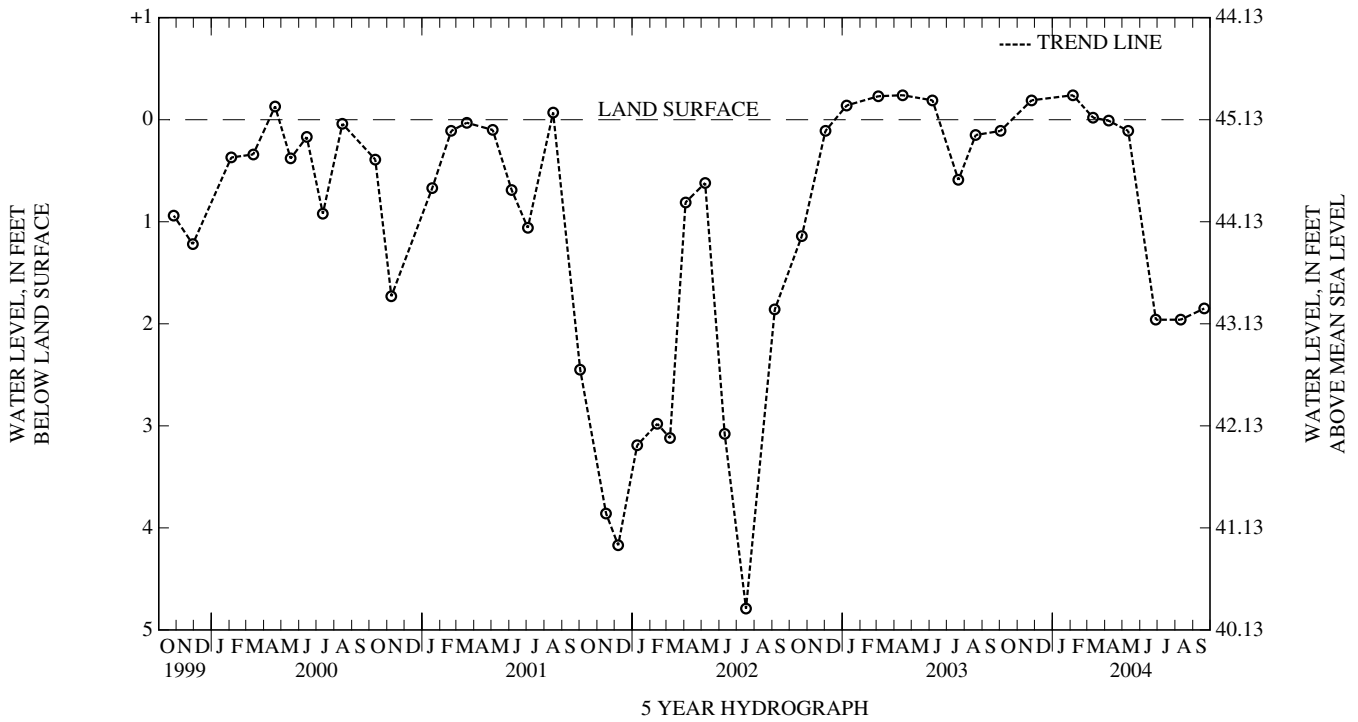
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.50 ft above land surface, April 4, 1994; lowest measured, 5.45 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.11	MAR 11, 2004	+.02	JUN 28, 2004	1.96
NOV 25	+.19	APR 07	.01	AUG 10	1.96
FEB 05, 2004	+.24	MAY 11	.11	SEP 20	1.85
HIGHEST	+.24	FEB 05, 2004			
LOWEST	1.96	JUN 28, 2004	AUG 10, 2004		



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-10. SITE ID.--384437075234501. PERMIT NUMBER.--95735.

LOCATION.--Lat 38°44'37", long 75°23'45", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 15 ft; casing diameter 2 in., to 12 ft; screen diameter 2 in., screened from 12 to 15 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.07 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.31 ft above land surface.

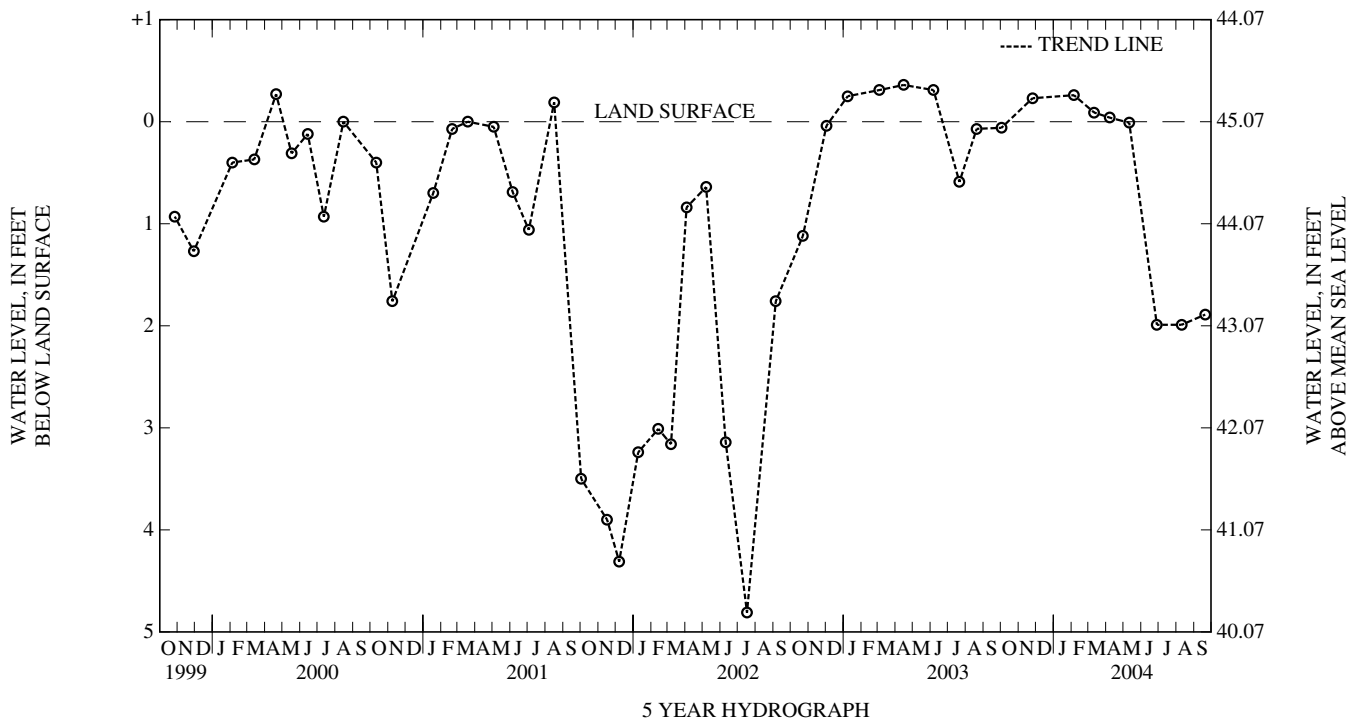
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.52 ft above land surface, December 3, 1996; lowest measured, 5.46 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.06	MAR 11, 2004	+.09	JUN 28, 2004	1.99
NOV 25	+.23	APR 07	+.04	AUG 10	1.99
FEB 05, 2004	+.26	MAY 11	.01	SEP 20	1.89
HIGHEST	+.26	FEB 05, 2004			
LOWEST	1.99	JUN 28, 2004	AUG 10, 2004		



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-11. SITE ID.--384437075234502. PERMIT NUMBER.--95748.

LOCATION.--Lat 38°44'37", long 75°23'45", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 73 ft; casing diameter 2 in., to 70 ft; screen diameter 2 in., screened from 70 to 73 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.11 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.07 ft above land surface.

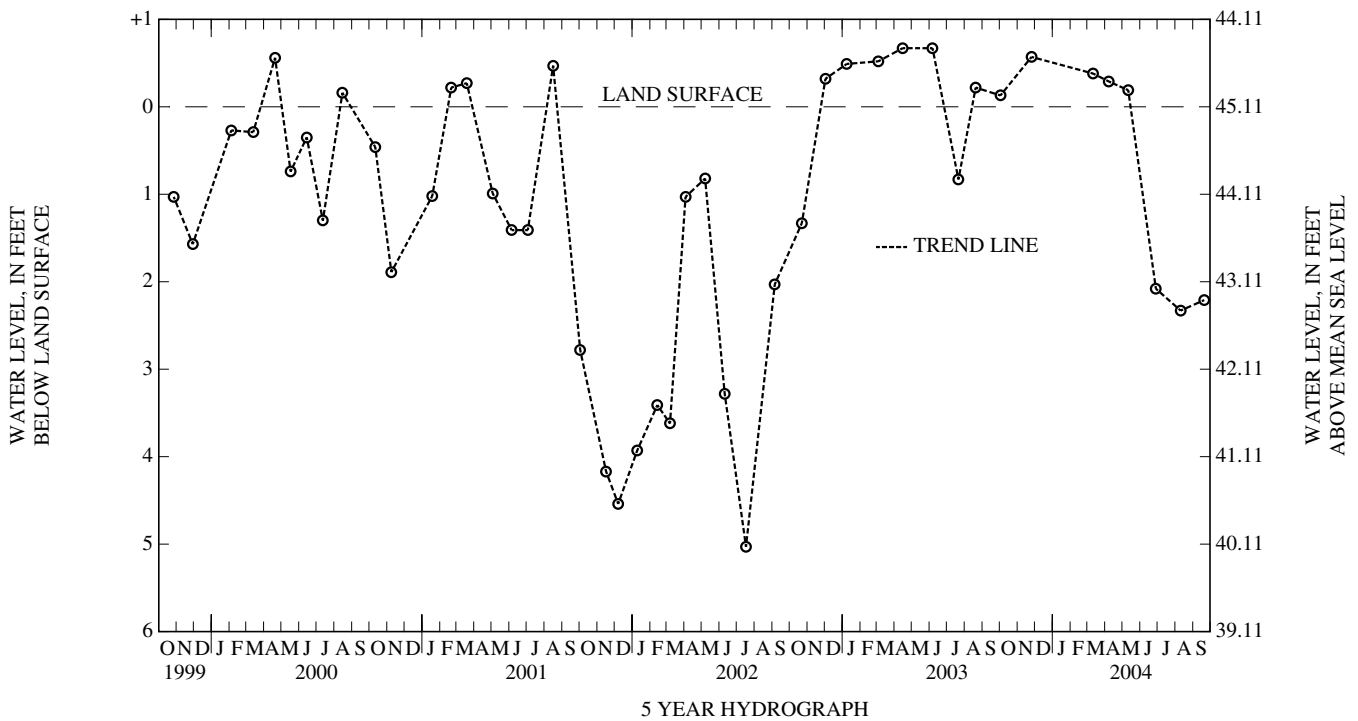
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.78 ft above land surface, February 25, 1998; lowest measured, 5.80 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	+1.13	MAR 11, 2004	+3.8	MAY 11, 2004	+1.19	AUG 10, 2004	2.33
NOV 25	+5.7	APR 07	+2.9	JUN 28	2.08	SEP 20	2.21
HIGHEST	+5.7	NOV 25, 2003					
LOWEST	2.33	AUG 10, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-12. SITE ID.--384438075234802. PERMIT NUMBER.--97465.

LOCATION.--Lat 38°44'38", long 75°23'48", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 59 ft; casing diameter 2 in., to 56 ft; screen diameter 2 in., screened from 56 to 59 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.89 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.5 ft above land surface.

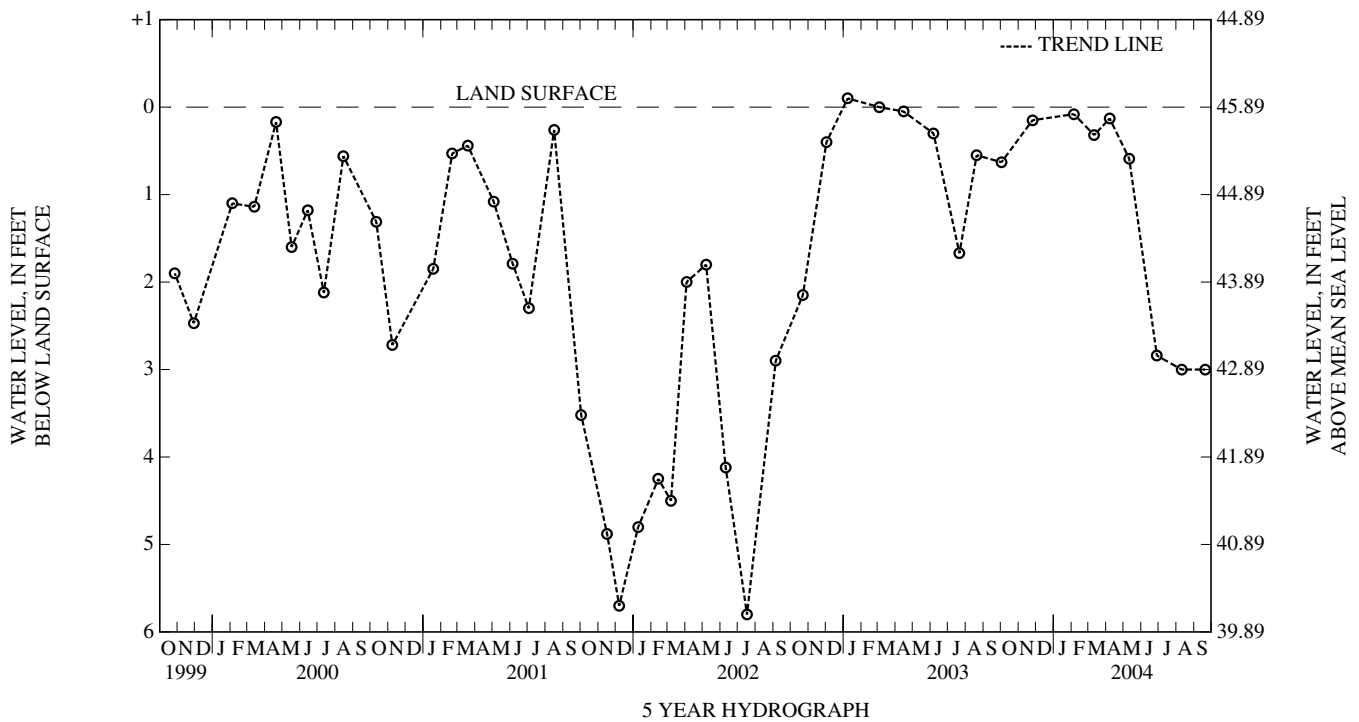
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.10 ft above land surface, January 8, 2003; lowest measured, 6.50 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.63	MAR 11, 2004	.32	JUN 28, 2004	2.84
NOV 25	.15	APR 07	.13	AUG 10	3.00
FEB 05, 2004	.08	MAY 11	.59	SEP 20	3.00
HIGHEST	.08	FEB 05, 2004			
LOWEST	3.00	AUG 10, 2004	SEP 20, 2004		



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-13. SITE ID.--384438075234801. PERMIT NUMBER.--07473.

LOCATION.--Lat 38°44'38", long 75°23'48", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 17 ft; casing diameter 2 in., to 14 ft; screen diameter 2 in., screened from 14 to 17 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 46.36 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.58 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.06 ft below land surface, March 3, 1994 (recorder); lowest measured, 7.38 ft below land surface, September 1, 2002 (recorder).

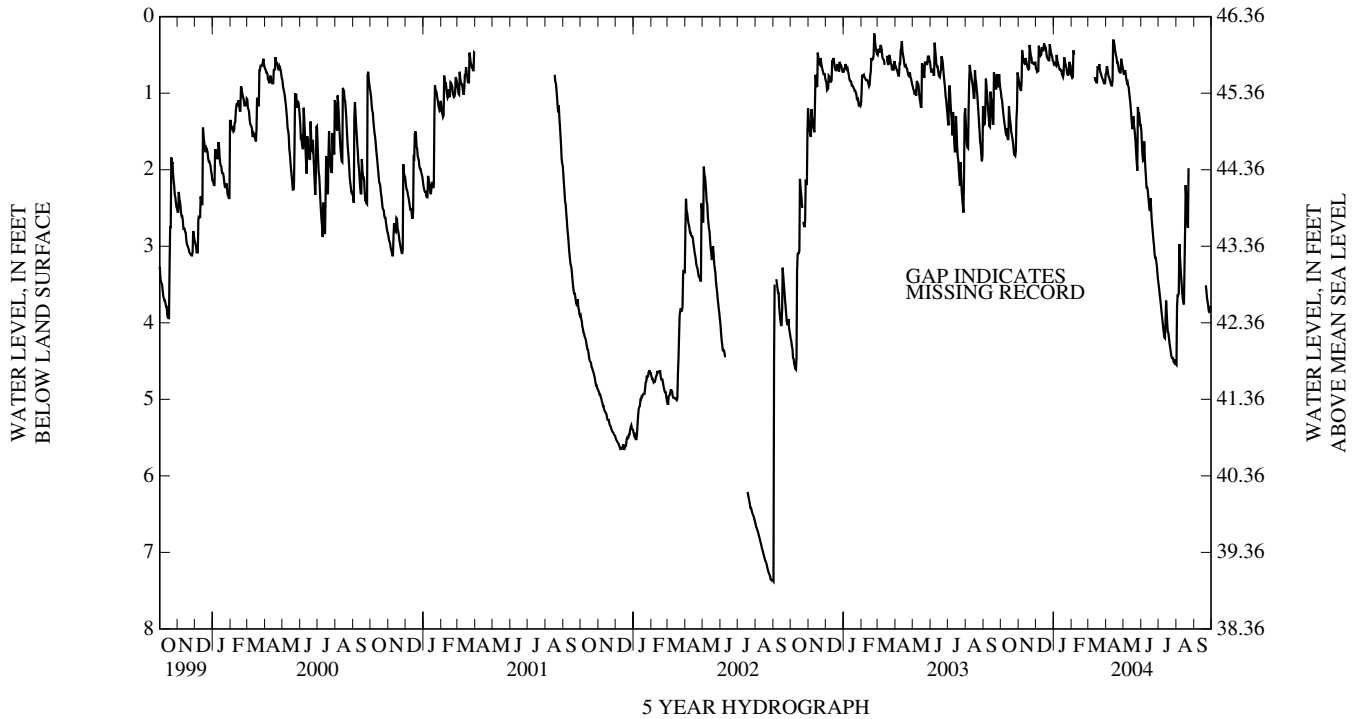
WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.99	MAR 11, 2004	.72	JUN 28, 2004	3.22
NOV 25	.57	APR 07	.80	AUG 10	3.41
FEB 05, 2004	.47	MAY 11	.94	SEP 20	3.38
HIGHEST .47 FEB 05, 2004					
LOWEST 3.41 AUG 10, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	0.98	0.94	0.83	0.78	0.68	0.60	0.62	0.56	0.78	0.76	---	---
2	1.06	0.98	0.87	0.83	0.69	0.67	0.61	0.59	0.80	0.78	---	---
3	1.09	1.06	0.92	0.87	0.72	0.69	0.62	0.60	0.79	0.38	---	---
4	1.17	1.09	0.95	0.92	0.71	0.71	0.63	0.62	0.44	0.38	---	---
5	1.25	1.17	0.97	0.84	0.71	0.32	0.64	0.45	0.48	0.44	---	---
6	1.32	1.25	0.84	0.30	0.38	0.32	0.50	0.45	0.47	0.20	---	---
7	1.38	1.32	0.44	0.33	0.45	0.38	0.57	0.50	---	---	---	---
8	1.43	1.38	0.53	0.44	0.48	0.45	0.60	0.57	---	---	---	---
9	1.49	1.43	0.56	0.53	0.51	0.48	0.63	0.59	---	---	---	---
10	1.54	1.49	0.59	0.56	0.50	0.41	0.66	0.63	---	---	---	---
11	1.55	1.33	0.61	0.59	0.41	0.20	0.69	0.66	---	---	---	---
12	1.46	1.32	0.63	0.43	0.41	0.29	0.69	0.66	---	---	0.79	0.73
13	1.60	1.46	0.54	0.40	0.44	0.41	0.70	0.66	---	---	0.83	0.79
14	1.60	1.16	0.58	0.54	0.44	0.17	0.70	0.65	---	---	0.83	0.80
15	1.17	0.98	0.62	0.58	0.35	0.24	0.75	0.63	---	---	0.86	0.81
16	1.28	1.17	0.65	0.62	0.38	0.35	0.77	0.74	---	---	0.86	0.55
17	1.35	1.28	0.68	0.65	0.39	0.34	0.79	0.75	---	---	0.65	0.57
18	1.41	1.35	0.69	0.68	0.41	0.39	0.75	0.41	---	---	0.67	0.65
19	1.51	1.41	0.68	0.31	0.47	0.41	0.53	0.44	---	---	0.66	0.54
20	1.54	1.51	0.37	0.28	0.53	0.47	0.58	0.53	---	---	0.62	0.61
21	1.59	1.49	0.45	0.37	0.54	0.53	0.61	0.58	---	---	0.69	0.61
22	1.64	1.59	0.51	0.45	0.56	0.53	0.65	0.59	---	---	0.73	0.69
23	1.72	1.63	0.53	0.51	0.57	0.56	0.67	0.65	---	---	0.75	0.73
24	1.80	1.72	0.60	0.53	0.57	0.20	0.74	0.66	---	---	0.78	0.75
25	1.81	1.80	0.60	0.57	0.36	0.28	0.76	0.74	---	---	0.80	0.78
26	1.82	1.75	0.61	0.57	0.42	0.36	0.76	0.75	---	---	0.82	0.80
27	1.75	1.35	0.62	0.61	0.47	0.42	0.75	0.55	---	---	0.84	0.82
28	1.35	1.20	0.62	0.50	0.50	0.47	0.59	0.55	---	---	0.87	0.84
29	1.20	0.58	0.60	0.50	0.52	0.50	0.64	0.59	---	---	0.87	0.87
30	0.73	0.65	0.60	0.59	0.57	0.51	0.64	0.64	---	---	0.87	0.75
31	0.78	0.73	---	---	0.58	0.56	0.76	0.64	---	---	0.75	0.71
MONTH	1.82	0.58	0.97	0.28	0.72	0.17	0.79	0.41	0.80	0.20	0.87	0.54

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	0.74	0.55	0.73	0.68	1.49	1.30	3.50	3.44	4.55	3.80	---	---
2	0.65	0.61	0.76	0.72	1.66	1.49	3.56	3.50	3.80	3.64	---	---
3	0.67	0.65	0.72	0.62	1.81	1.66	3.64	3.56	3.64	3.54	---	---
4	0.73	0.67	0.70	0.62	1.88	1.81	3.70	3.64	3.64	3.54	---	---
5	0.78	0.73	0.76	0.70	1.87	1.58	3.77	3.70	3.62	2.87	---	---
6	0.79	0.77	0.82	0.76	1.63	1.57	3.85	3.77	2.97	2.86	---	---
7	0.82	0.78	0.86	0.81	1.83	1.63	3.92	3.85	3.12	2.97	---	---
8	0.85	0.82	0.85	0.80	1.98	1.83	3.99	3.92	3.26	3.12	---	---
9	0.88	0.85	0.90	0.85	2.10	1.98	4.07	3.99	3.38	3.26	---	---
10	0.90	0.88	0.92	0.86	2.23	2.10	4.13	4.07	3.49	3.38	---	---
11	0.90	0.82	1.00	0.92	2.23	2.07	4.19	4.13	3.61	3.49	---	---
12	0.83	0.31	1.07	1.00	2.26	2.04	4.20	3.99	3.69	3.61	---	---
13	0.31	0.22	1.14	1.07	2.34	2.26	3.99	3.70	3.73	3.69	---	---
14	0.31	0.25	1.23	1.14	2.42	2.34	3.71	3.67	3.76	3.26	---	---
15	0.35	0.29	1.35	1.23	2.51	2.42	3.86	3.71	3.26	2.79	---	---
16	0.42	0.35	1.43	1.35	2.54	2.21	4.01	3.86	2.79	2.07	---	---
17	0.47	0.42	1.47	1.13	2.37	2.21	4.12	4.01	2.20	2.08	---	---
18	0.51	0.47	1.30	1.13	2.51	2.31	4.13	4.12	2.37	2.20	---	---
19	0.54	0.51	1.41	1.30	2.65	2.51	4.20	4.13	2.54	2.37	---	---
20	0.60	0.54	1.46	1.41	2.74	2.65	4.27	4.20	2.68	2.54	---	---
21	0.60	0.60	1.54	1.45	2.83	2.74	4.32	4.27	2.76	1.81	3.51	3.43
22	0.65	0.60	1.65	1.53	2.92	2.83	4.37	4.32	1.98	1.80	3.58	3.51
23	0.70	0.65	1.78	1.65	2.99	2.92	4.43	4.37	---	---	3.67	3.58
24	0.72	0.68	1.90	1.78	3.10	2.99	4.46	4.43	---	---	3.72	3.67
25	0.73	0.72	2.01	1.18	3.15	3.10	4.46	4.46	---	---	3.77	3.72
26	0.73	0.48	1.18	1.06	3.15	2.92	4.46	4.46	---	---	3.84	3.77
27	0.55	0.46	1.26	1.14	3.20	3.04	4.51	4.46	---	---	3.86	3.84
28	0.61	0.55	1.26	0.99	3.26	3.20	4.52	4.48	---	---	3.86	3.79
29	0.64	0.61	1.33	1.13	3.36	3.26	4.48	4.43	---	---	3.79	3.78
30	0.68	0.64	1.42	1.33	3.44	3.36	4.51	4.44	---	---	3.78	3.78
31	---	---	1.42	1.26	---	---	4.54	4.51	---	---	---	---
MONTH	0.90	0.22	2.01	0.62	3.44	1.30	4.54	3.44	4.55	1.80	3.86	3.43
YEAR	4.55	0.17										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY—Continued

WELL NUMBER.--Of12-14. SITE ID.--384438075234803. PERMIT NUMBER.--97468.

LOCATION.--Lat 38°44'38", long 75°23'48", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 80 ft; casing diameter 2 in., to 77 ft; screen diameter 2 in., screened from 77 to 80 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.94 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.56 ft above land surface.

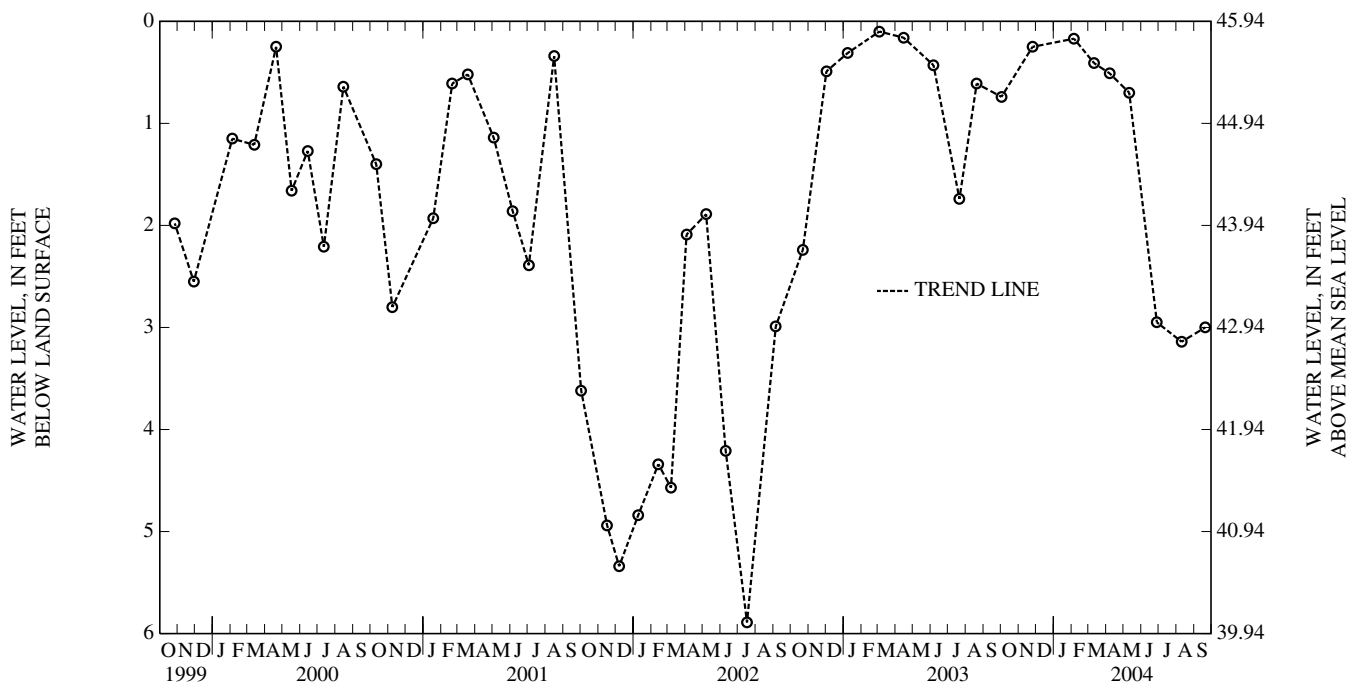
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft below land surface, February 26, 1998; lowest measured, 7.25 ft below land surface, August 24, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.74	MAR 11, 2004	.41	JUN 28, 2004	2.95
NOV 25	.25	APR 07	.51	AUG 10	3.14
FEB 05, 2004	.17	MAY 11	.70	SEP 20	3.00
HIGHEST	.17	FEB 05, 2004			
LOWEST	3.14	AUG 10, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-15. SITE ID.--384441075233702. PERMIT NUMBER.--95737.

LOCATION.--Lat 38°44'41", long 75°23'37", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 82 ft; casing diameter 2 in., to 79 ft; screen diameter 2 in., screened from 79 to 82 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.59 ft above land surface.

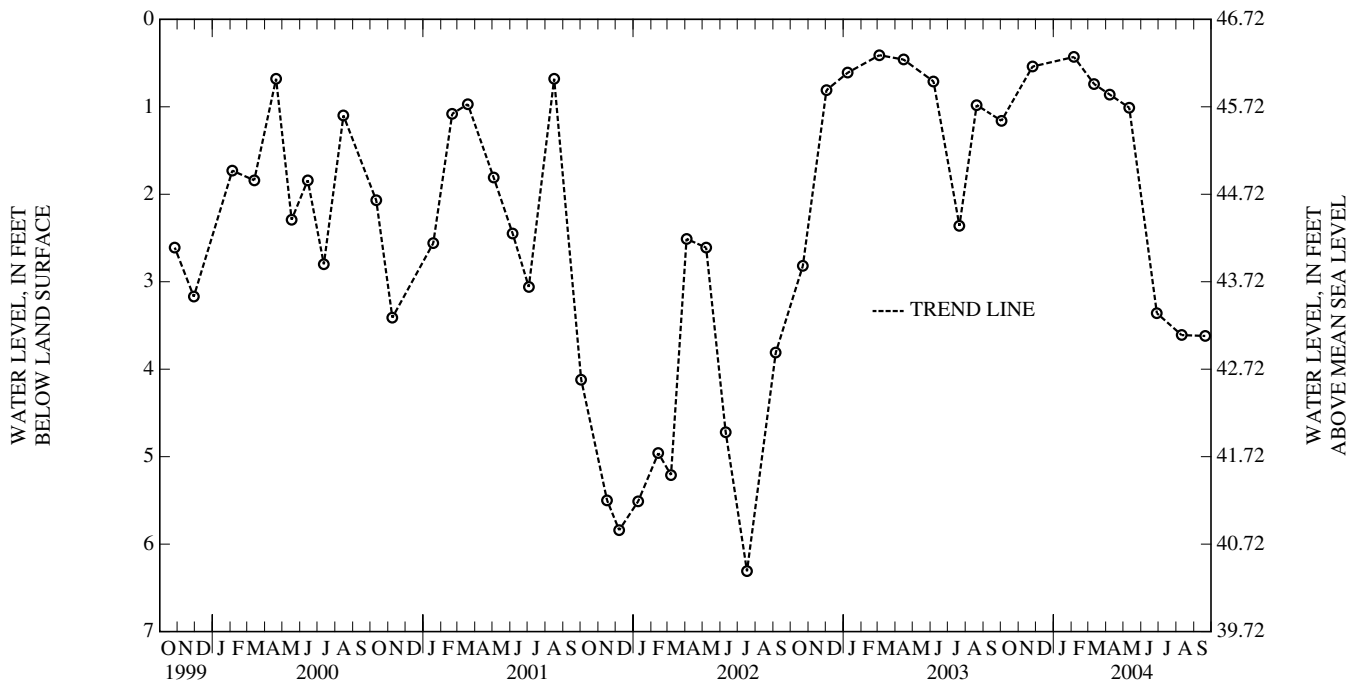
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.41 ft below land surface, March 4, 2003; lowest measured, 8.10 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.16	MAR 11, 2004	.74	JUN 28, 2004	3.36
NOV 25	.54	APR 07	.86	AUG 10	3.61
FEB 05, 2004	.43	MAY 11	1.01	SEP 20	3.62
HIGHEST	.43	FEB 05, 2004			
LOWEST	3.62	SEP 20, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-16. SITE ID.--384441075233701. PERMIT NUMBER.--95738.

LOCATION.--Lat 38°44'41", long 75°23'37", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.46 ft above land surface.

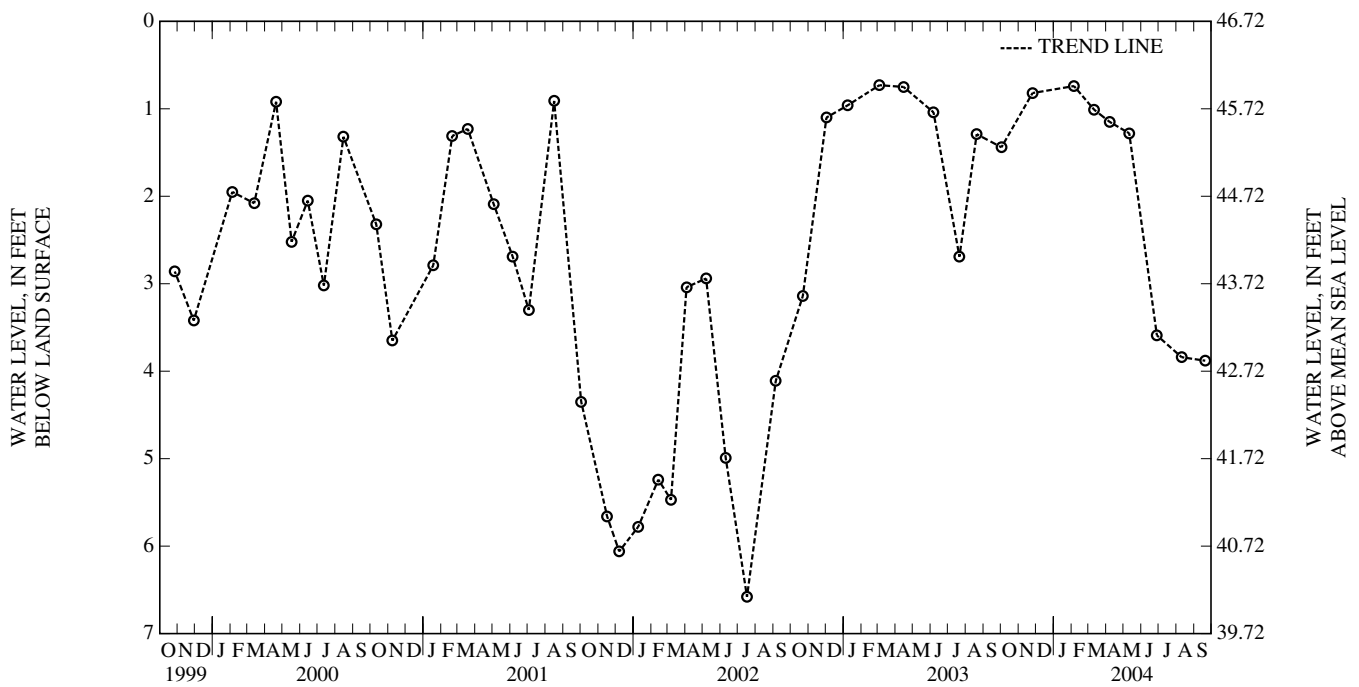
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.18 ft below land surface, April 4, 1994; lowest measured, 7.28 ft below land surface, October 19, 1995 and December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.44	MAR 11, 2004	1.01	JUN 28, 2004	3.59
NOV 25	.82	APR 07	1.15	AUG 10	3.84
FEB 05, 2004	.74	MAY 11	1.28	SEP 20	3.88
HIGHEST	.74	FEB 05, 2004			
LOWEST	3.88	SEP 20, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-18. SITE ID.--384444075234101. PERMIT NUMBER.--95752.

LOCATION.--Lat 38°44'44", long 75°23'41", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 15 ft; casing diameter 2 in., to 12 ft; screen diameter 2 in., screened from 12 to 15 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.07 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.39 ft above land surface.

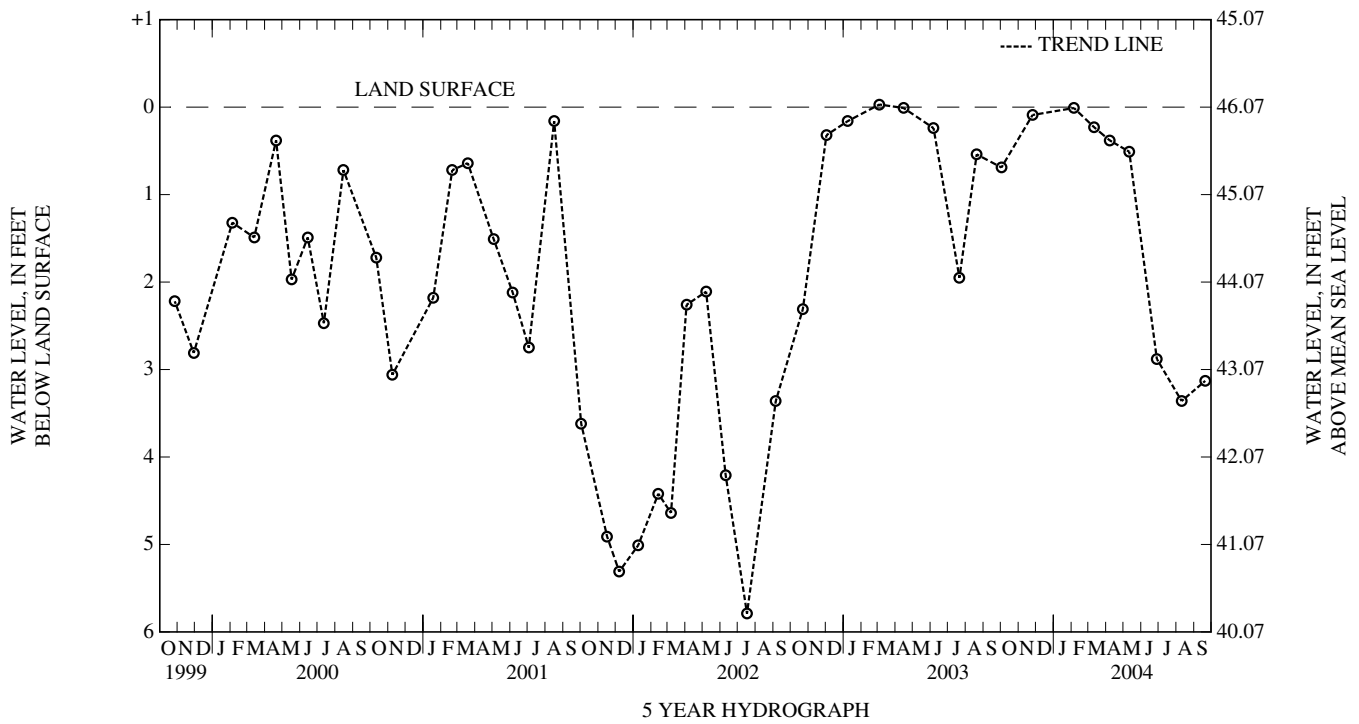
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft above land surface, March 4, 2003; lowest measured, 6.71 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.69	MAR 11, 2004	.23	JUN 28, 2004	2.88
NOV 25	.09	APR 07	.38	AUG 10	3.36
FEB 05, 2004	.01	MAY 11	.51	SEP 20	3.13
HIGHEST	.01	FEB 05, 2004			
LOWEST	3.36	AUG 10, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of12-19. SITE ID.--384444075234102. PERMIT NUMBER.--95749.

LOCATION.--Lat 38°44'44", long 75°23'41", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 79 ft; casing diameter 2 in., to 76 ft; screen diameter 2 in., screened from 76 to 79 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.96 ft above National Geodetic Vertical Datum of 1929. Measuring Point: Top of metal sleeve, 2.62 ft above land surface.

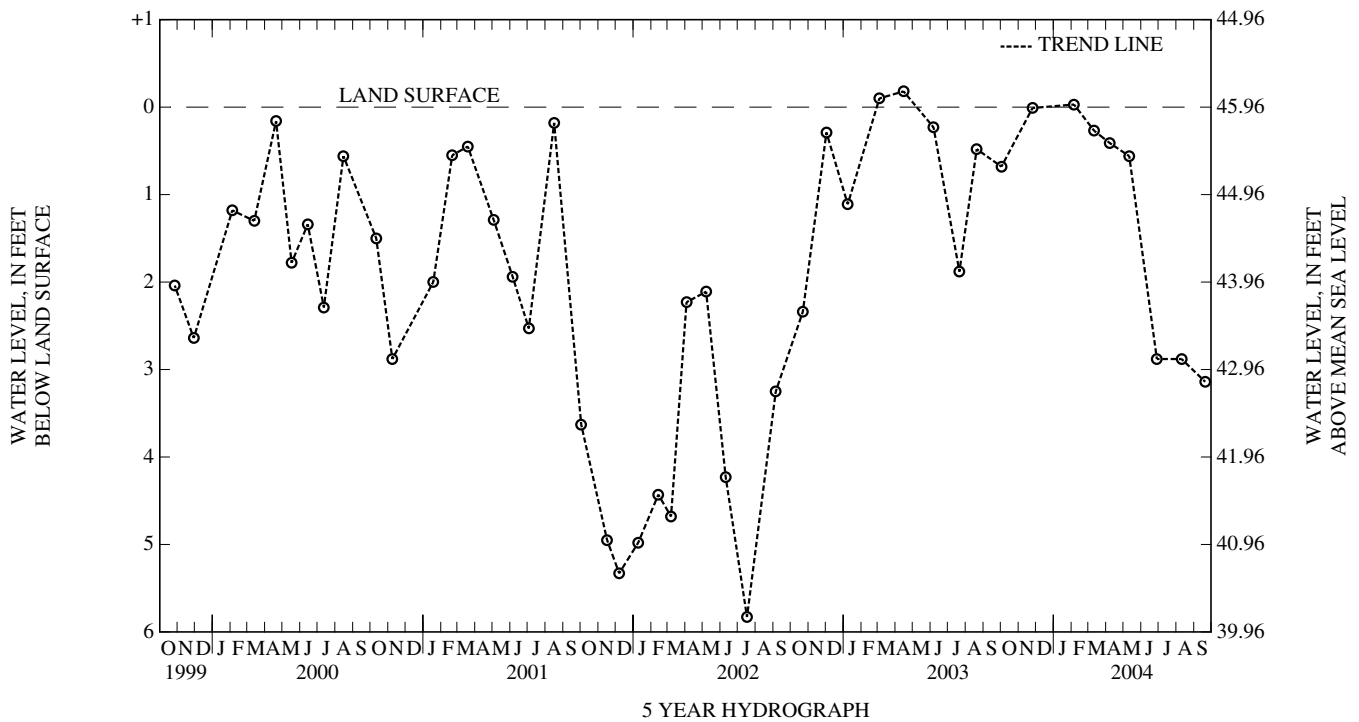
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.18 ft above land surface, April 15, 2003; lowest measured, 6.55 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.68	MAR 11, 2004	.27	JUN 28, 2004	2.88
NOV 25	.01	APR 07	.41	AUG 10	2.88
FEB 05, 2004	+.03	MAY 11	.56	SEP 20	3.14
HIGHEST	+.03	FEB 05, 2004			
LOWEST	3.14	SEP 20, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of13-01. SITE ID.--384401075224903. PERMIT NUMBER.--95778.

LOCATION.--Lat 38°44'02", long 75°22'50", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 103 ft; casing diameter 2 in., to 100 ft; screen diameter 2 in., screened from 100 to 103 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.29 ft above land surface.

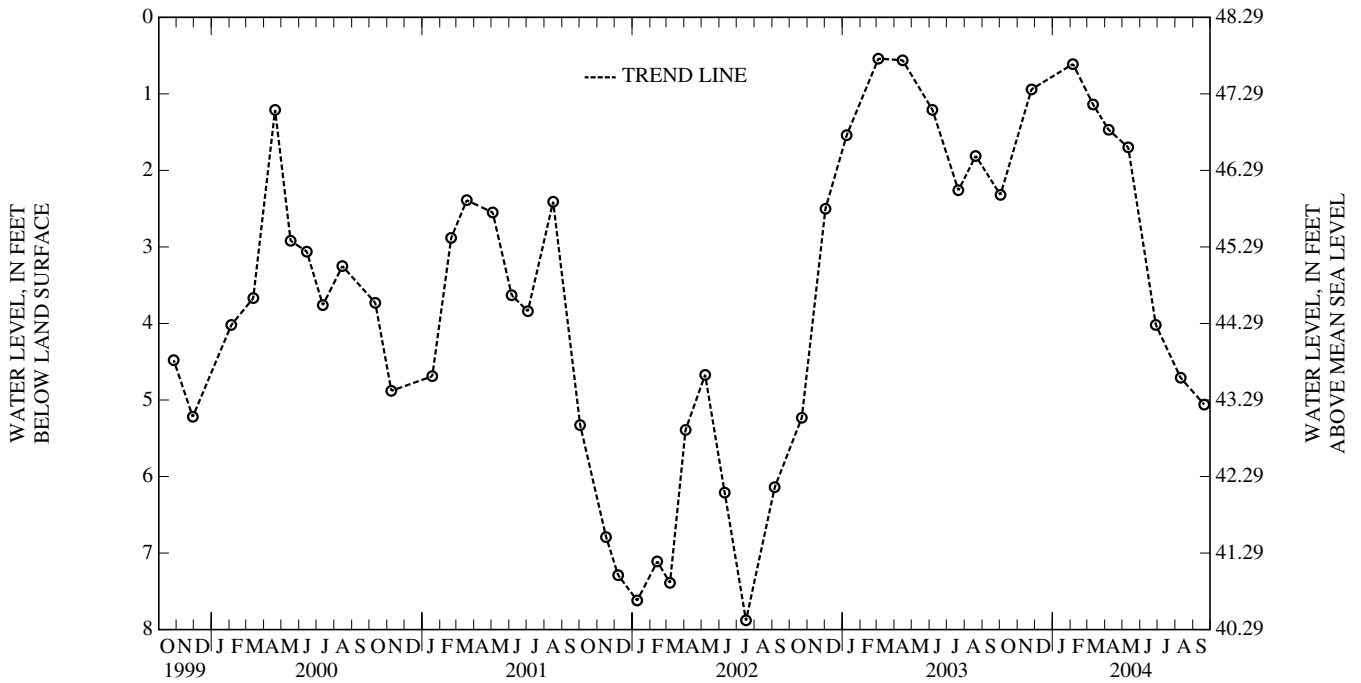
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.10 ft below land surface, April 18, 1994; lowest measured, 8.44 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.32	MAR 11, 2004	1.14	JUN 28, 2004	4.02
NOV 25	.94	APR 07	1.47	AUG 10	4.71
FEB 05, 2004	.61	MAY 11	1.70	SEP 20	5.06
HIGHEST	.61	FEB 05, 2004			
LOWEST	5.06	SEP 20, 2004			



SUSSEX COUNTY—Continued

WELL NUMBER.--Of13-02. SITE ID.--384402075225002. PERMIT NUMBER.--95787.

LOCATION.--Lat 38°44'02", long 75°22'50", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 52 ft; casing diameter 2 in., to 49 ft; screen diameter 2 in., screened from 49 to 52 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.33 ft above land surface.

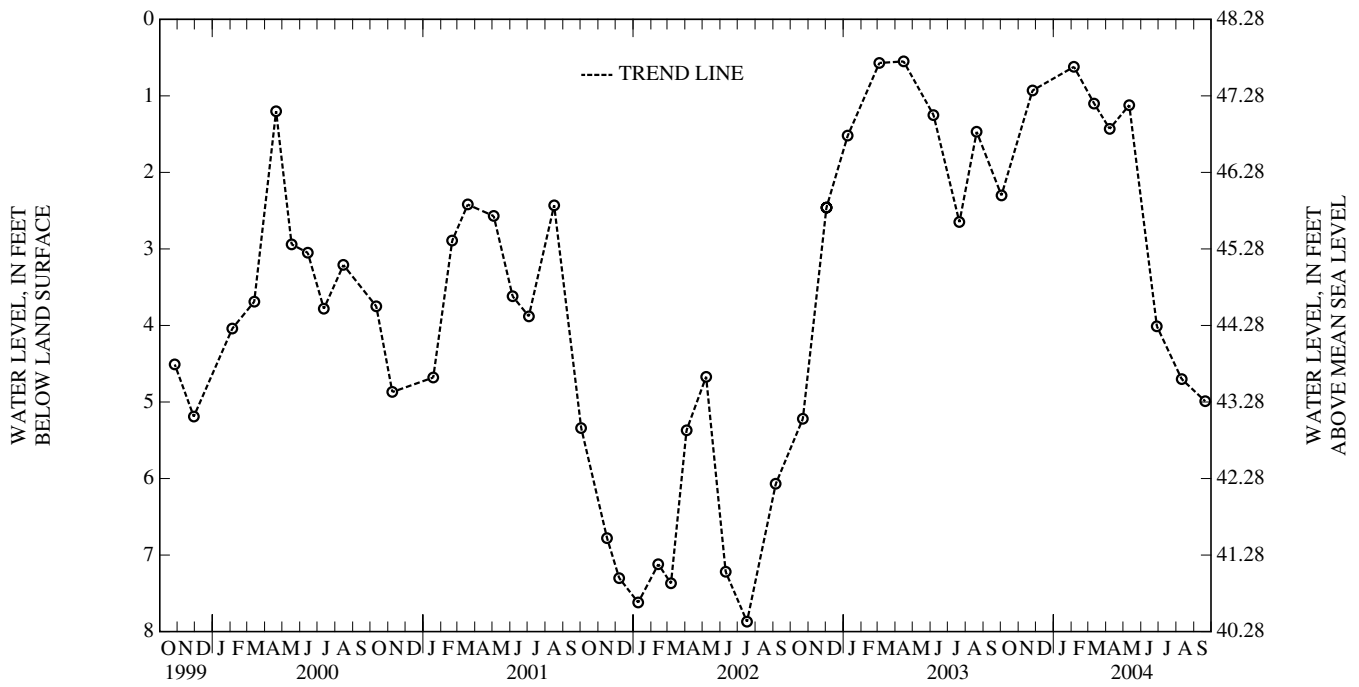
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.12 ft below land surface, March 22, 1994; lowest measured, 8.45 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.30	MAR 11, 2004	1.10	JUN 28, 2004	4.01
NOV 25	.93	APR 07	1.43	AUG 10	4.70
FEB 05, 2004	.62	MAY 11	1.12	SEP 20	4.99
HIGHEST	.62	FEB 05, 2004			
LOWEST	4.99	SEP 20, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of13-03. SITE ID.--384401075224901. PERMIT NUMBER.--95801.

LOCATION.--Lat 38°44'01", long 75°22'49", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code:121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 20 ft; casing diameter 2 in., to 17 ft; screen diameter 2 in., screened from 17 to 20 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 48.37 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.28 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.49 ft above land surface, April 18, 1994; lowest measured, 9.28 ft below land surface, September 1, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

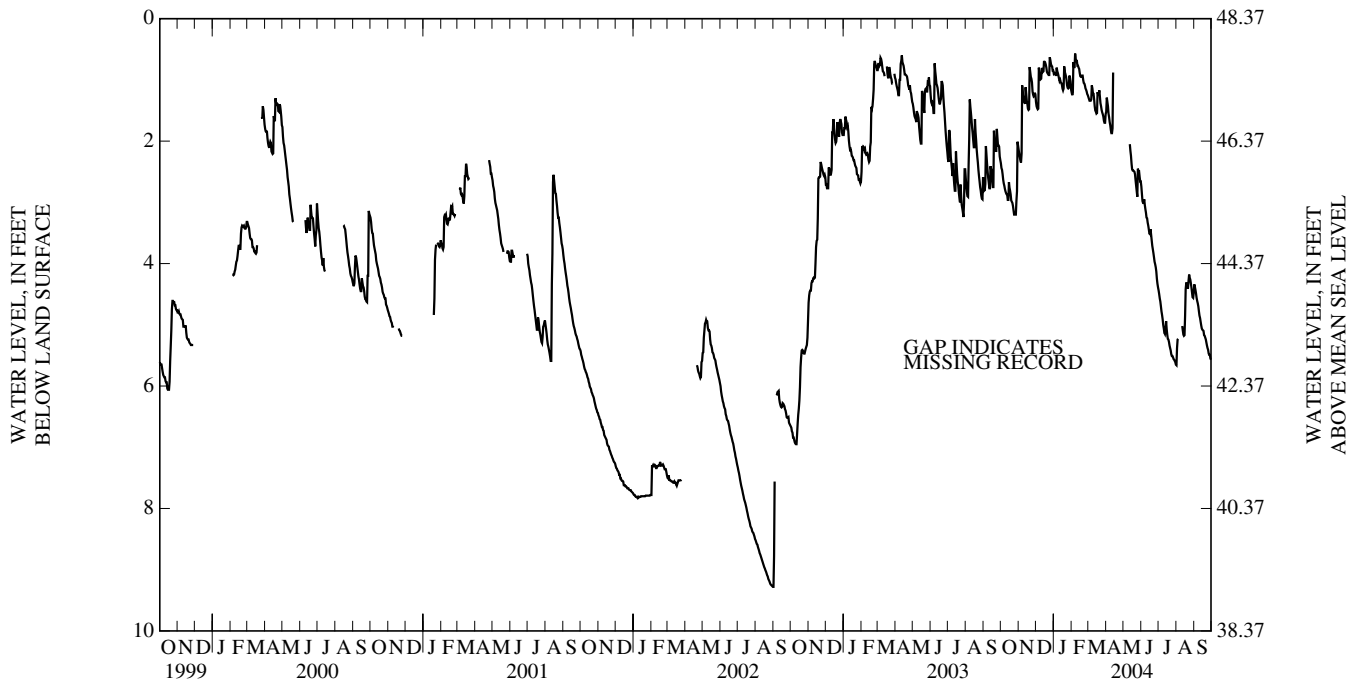
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.37	FEB 10, 2004	.70	MAY 11, 2004	1.86	SEP 20, 2004	5.20
NOV 25	1.12	MAR 11	1.24	JUN 28	4.13		
FEB 05, 2004	.75	APR 07	1.62	AUG 10	4.85		
HIGHEST	.70	FEB 10, 2004					
LOWEST	5.20	SEP 20, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.36	2.31	2.15	2.08	1.36	1.24	0.90	0.85	1.21	1.16	1.28	1.25
2	2.44	2.36	2.21	2.15	1.43	1.36	0.89	0.87	1.25	1.21	1.31	1.26
3	2.47	2.44	2.27	2.21	1.46	1.43	0.90	0.88	1.21	0.62	1.34	1.31
4	2.54	2.47	2.32	2.27	1.48	1.46	0.92	0.89	0.71	0.62	1.34	1.31
5	2.63	2.54	2.35	2.20	1.47	0.78	0.92	0.68	0.79	0.71	1.34	1.31
6	2.69	2.63	2.20	1.01	0.80	0.74	0.80	0.68	0.79	0.45	1.32	0.97
7	2.73	2.69	1.09	1.01	0.91	0.80	0.86	0.80	0.57	0.45	1.09	1.06
8	2.78	2.73	1.23	1.09	0.96	0.91	0.89	0.86	0.66	0.57	1.14	1.06
9	2.82	2.78	1.30	1.23	0.99	0.96	0.93	0.88	0.69	0.66	1.23	1.14
10	2.85	2.82	1.35	1.30	0.98	0.82	0.98	0.93	0.69	0.67	1.23	1.23
11	2.87	2.79	1.37	1.35	0.82	0.56	1.02	0.98	0.77	0.69	1.32	1.23
12	2.88	2.77	1.39	1.04	0.82	0.72	1.00	0.98	0.77	0.77	1.43	1.32
13	2.96	2.88	1.12	0.95	0.87	0.82	1.04	0.98	0.80	0.77	1.50	1.43
14	2.96	2.62	1.22	1.12	0.86	0.48	1.05	0.97	0.82	0.80	1.52	1.50
15	2.67	2.47	1.34	1.22	0.69	0.52	1.08	0.95	0.89	0.82	1.55	1.50
16	2.76	2.67	1.39	1.34	0.72	0.69	1.14	1.08	0.94	0.89	1.54	1.08
17	2.81	2.76	1.47	1.39	0.72	0.63	1.17	1.14	0.95	0.94	1.20	1.09
18	2.87	2.81	1.49	1.47	0.75	0.67	1.14	0.64	0.95	0.89	1.24	1.20
19	2.97	2.87	1.48	0.76	0.80	0.75	0.78	0.65	0.93	0.89	1.24	1.10
20	2.99	2.97	0.79	0.70	0.87	0.80	0.87	0.78	0.93	0.90	1.17	1.11
21	3.01	2.94	0.87	0.79	0.89	0.87	0.90	0.87	1.00	0.90	1.27	1.11
22	3.06	3.01	0.95	0.87	0.89	0.87	0.94	0.88	1.05	1.00	1.38	1.27
23	3.13	3.06	0.98	0.95	0.92	0.89	1.00	0.94	1.06	1.05	1.43	1.38
24	3.20	3.13	1.04	0.98	0.92	0.45	1.09	0.99	1.09	1.06	1.49	1.43
25	3.20	3.20	1.19	1.03	0.63	0.53	1.13	1.09	1.14	1.09	1.53	1.49
26	3.20	3.20	1.24	1.19	0.68	0.63	1.14	1.13	1.16	1.14	1.56	1.53
27	3.20	2.98	1.27	1.24	0.74	0.68	1.13	0.85	1.19	1.16	1.60	1.56
28	2.98	2.82	1.26	1.05	0.77	0.74	0.93	0.85	1.23	1.19	1.67	1.60
29	2.82	1.88	1.21	1.05	0.78	0.77	0.96	0.92	1.25	1.23	1.70	1.67
30	2.01	1.90	1.24	1.21	0.85	0.76	1.03	0.96	---	---	1.70	1.56
31	2.08	2.01	---	---	0.85	0.84	1.16	1.03	---	---	1.56	1.52
MONTH	3.20	1.88	2.35	0.70	1.48	0.45	1.17	0.64	1.25	0.45	1.70	0.97

SUSSEX COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1.52	1.21	---	---	2.74	2.59	4.44	4.39	5.66	5.38	4.34	4.30
2	1.29	1.22	---	---	2.86	2.74	4.50	4.44	5.38	5.24	4.38	4.31
3	1.36	1.29	---	---	2.98	2.86	4.57	4.50	5.24	5.23	4.43	4.38
4	1.43	1.35	---	---	3.01	2.98	4.62	4.57	5.23	5.23	4.49	4.43
5	1.55	1.43	---	---	3.01	2.95	4.70	4.62	---	---	4.56	4.49
6	1.61	1.55	---	---	2.95	2.93	4.78	4.70	---	---	4.61	4.56
7	1.69	1.61	---	---	3.04	2.93	4.84	4.78	---	---	4.65	4.61
8	1.74	1.69	---	---	3.11	3.04	4.91	4.84	---	---	4.70	4.65
9	1.82	1.74	---	---	3.17	3.11	5.00	4.91	---	---	4.78	4.70
10	1.87	1.82	---	---	3.25	3.17	5.06	5.00	---	---	4.85	4.78
11	1.87	1.77	---	---	3.26	3.25	5.13	5.06	5.02	4.93	4.89	4.85
12	1.79	0.88	2.05	1.95	3.33	3.25	5.15	5.08	5.09	5.02	4.95	4.89
13	0.88	0.60	2.16	2.05	3.38	3.33	5.08	4.94	5.16	5.09	5.01	4.95
14	---	---	2.24	2.16	3.44	3.38	4.94	4.94	5.18	5.16	5.06	5.01
15	---	---	2.37	2.24	3.51	3.44	5.07	4.94	5.17	4.85	5.08	5.06
16	---	---	2.46	2.37	3.52	3.41	5.16	5.07	4.85	4.42	5.09	5.08
17	---	---	2.48	2.46	3.44	3.40	5.23	5.16	4.42	4.32	5.10	5.09
18	---	---	2.48	2.48	3.53	3.44	5.24	5.23	4.32	4.30	5.17	5.10
19	---	---	2.49	2.48	3.62	3.53	5.28	5.24	4.32	4.30	5.18	5.17
20	---	---	2.50	2.49	3.71	3.62	5.34	5.28	4.38	4.32	5.21	5.17
21	---	---	2.54	2.50	3.77	3.71	5.38	5.34	4.41	4.28	5.24	5.21
22	---	---	2.64	2.54	3.83	3.77	5.42	5.38	4.28	4.18	5.29	5.24
23	---	---	2.73	2.64	3.90	3.83	5.48	5.42	4.18	4.16	5.34	5.29
24	---	---	2.82	2.73	3.97	3.90	5.51	5.48	4.23	4.17	5.38	5.34
25	---	---	2.91	2.45	4.01	3.97	5.51	5.51	4.26	4.23	5.41	5.38
26	---	---	2.45	2.38	4.06	4.01	5.53	5.51	4.32	4.26	5.47	5.41
27	---	---	2.49	2.39	4.13	4.06	5.56	5.53	4.39	4.32	5.49	5.47
28	---	---	2.49	2.26	4.25	4.13	5.57	5.56	4.47	4.39	5.49	5.49
29	---	---	2.58	2.37	4.33	4.25	5.59	5.57	4.55	4.47	5.55	5.49
30	---	---	2.66	2.58	4.39	4.33	5.61	5.59	4.56	4.48	5.57	5.55
31	---	---	2.66	2.59	---	---	5.65	5.61	4.48	4.34	---	---
MONTH	1.87	0.60	2.91	1.95	4.39	2.59	5.65	4.39	5.66	4.16	5.57	4.30
YEAR	5.66	0.45										

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of13-04. SITE ID.--384403075224701. PERMIT NUMBER.--95779.

LOCATION.--Lat 38°44'03", long 75°22'47", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.75 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.41 ft above land surface.

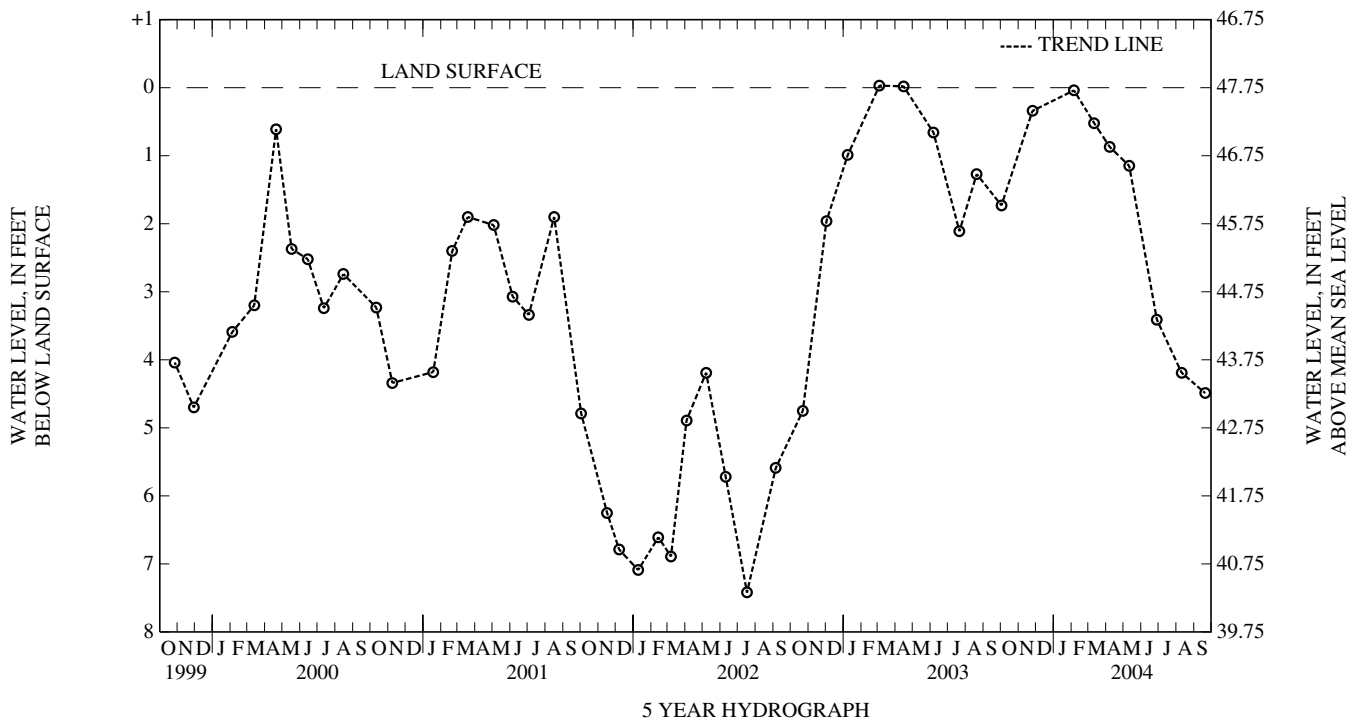
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.49 ft above land surface, April 18, 1994; lowest measured, 7.98 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.73	MAR 11, 2004	.52	JUN 28, 2004	3.41
NOV 25	.34	APR 07	.87	AUG 10	4.19
FEB 05, 2004	.04	MAY 11	1.15	SEP 20	4.49
HIGHEST	.04	FEB 05, 2004			
LOWEST	4.49	SEP 20, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY—Continued

WELL NUMBER.--Of13-05. SITE ID.--384404075225001. PERMIT NUMBER.--95802.

LOCATION.--Lat 38°44'04", long 75°22'50", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.26 ft above land surface.

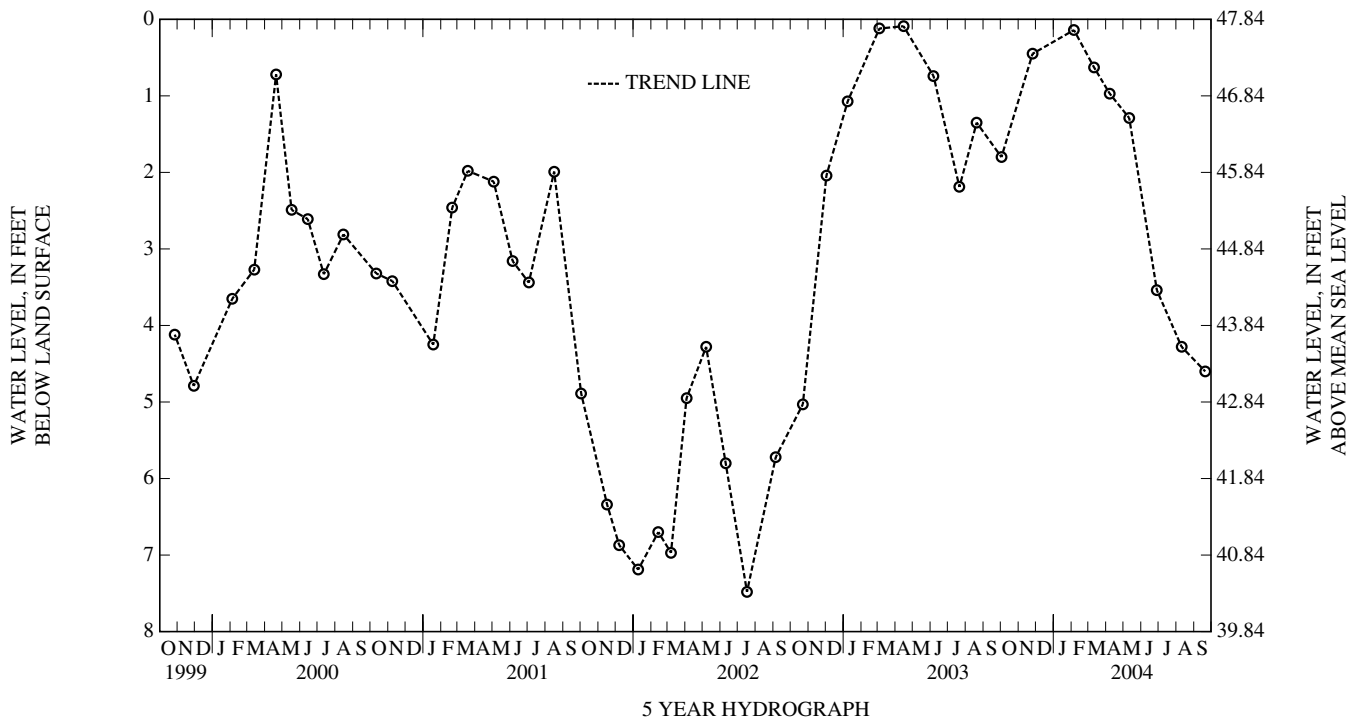
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.38 ft above land surface, April 18, 1994; lowest measured, 8.04 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.80	MAR 11, 2004	.63	JUN 28, 2004	3.54
NOV 25	.45	APR 07	.97	AUG 10	4.28
FEB 05, 2004	.14	MAY 11	1.29	SEP 20	4.60
HIGHEST	.14	FEB 05, 2004			
LOWEST	4.60	SEP 20, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of13-06. SITE ID.--384405075224701. PERMIT NUMBER.--95780.

LOCATION.--Lat 38°44'05", long 75°22'47", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.49 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.22 ft above land surface.

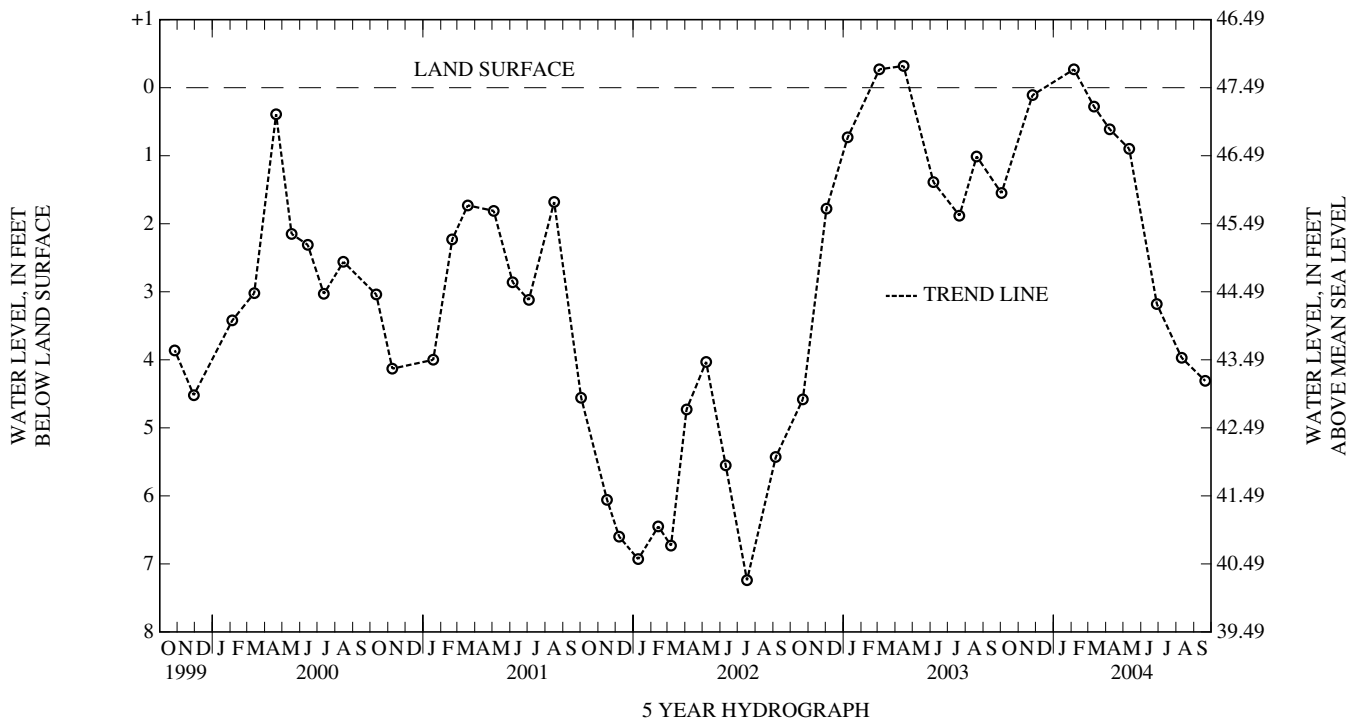
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.76 ft above land surface, April 18, 1994; lowest measured, 7.82 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.55	MAR 11, 2004	.28	JUN 28, 2004	3.18
NOV 25	.11	APR 07	.61	AUG 10	3.97
FEB 05, 2004	+.27	MAY 11	.90	SEP 20	4.31
HIGHEST	+.27	FEB 05, 2004			
LOWEST	4.31	SEP 20, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY—Continued

WELL NUMBER.--Of13-07. SITE ID.--384405075224601. PERMIT NUMBER.--95781.

LOCATION.--Lat 38°44'05", long 75°22'46", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.38 ft above land surface.

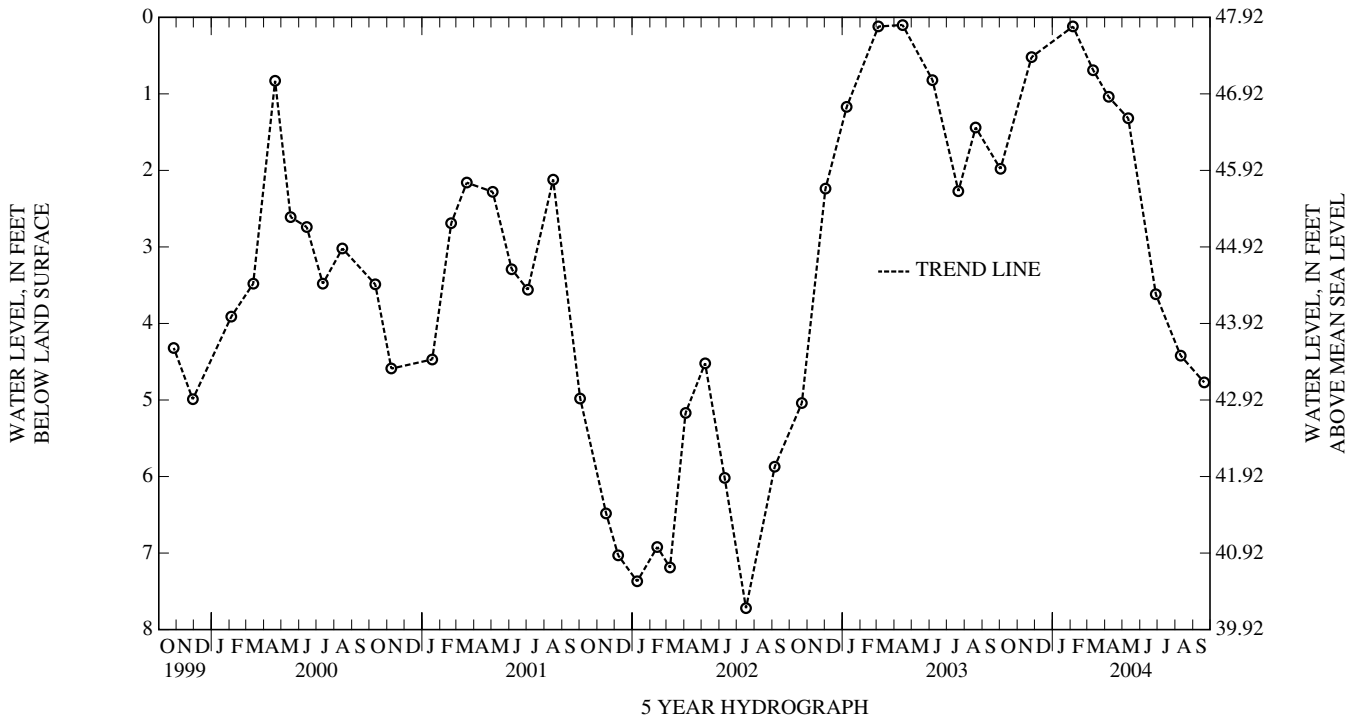
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.37 ft above land surface, April 18, 1994; lowest measured, 9.21 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.98	MAR 11, 2004	.69	JUN 28, 2004	3.62
NOV 25	.52	APR 07	1.04	AUG 10	4.42
FEB 05, 2004	.12	MAY 11	1.32	SEP 20	4.77
HIGHEST	.12	FEB 05, 2004			
LOWEST	4.77	SEP 20, 2004			



SUSSEX COUNTY--Continued

WELL NUMBER.--Of13-08. SITE ID.--384406075224601. PERMIT NUMBER.--97463.

LOCATION.--Lat 38°44'06", long 75°22'46", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 48.91 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.63 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.40 ft below land surface, March 3, 1994 (recorder); lowest measured, 10.05 ft below land surface, August 31, 2002 (recorder).

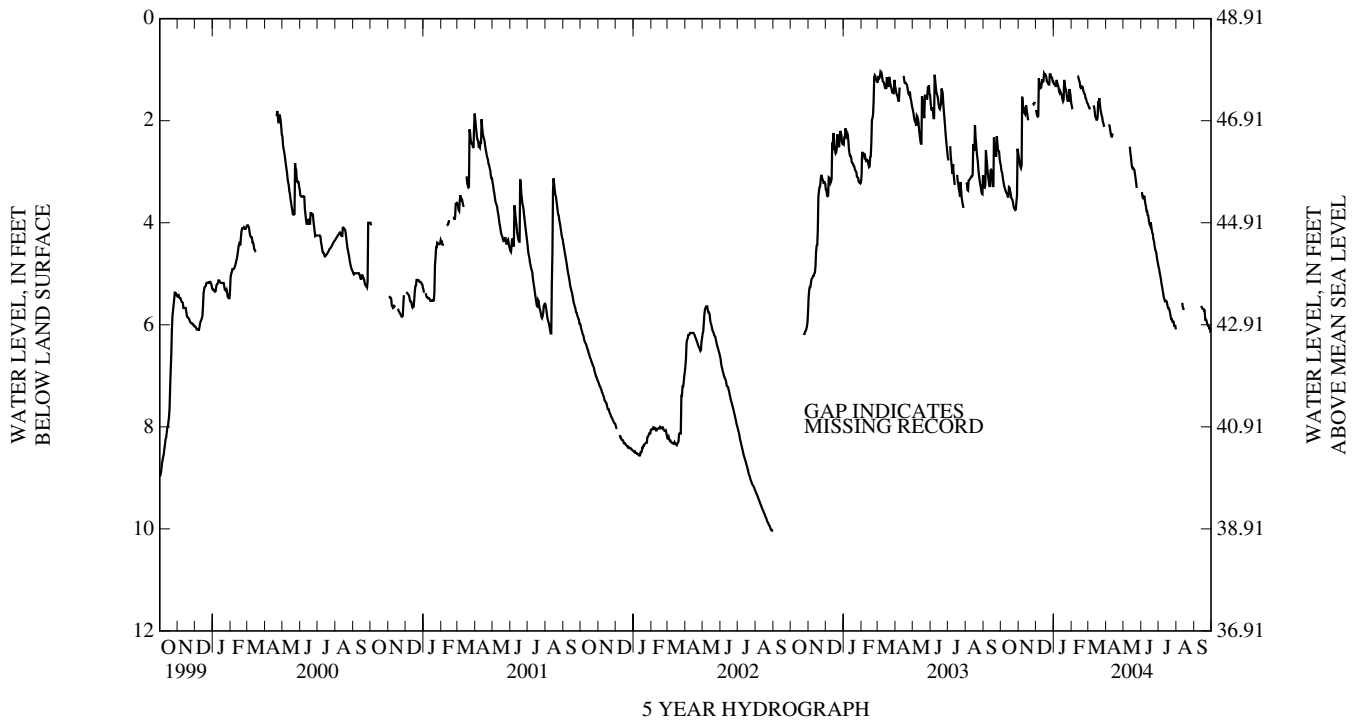
WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.90	FEB 10, 2004	1.07	MAY 11, 2004	2.22	SEP 20, 2004	5.81
NOV 25	1.52	MAR 11	1.72	JUN 28	4.65		
FEB 05, 2004	1.17	APR 07	2.08	AUG 10	5.47		
HIGHEST	1.07	FEB 10, 2004					
LOWEST	5.81	SEP 20, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.88	2.83	2.71	2.63	1.79	1.66	1.28	1.23	1.70	1.64	1.70	1.67
2	2.98	2.88	2.78	2.71	1.85	1.79	1.28	1.27	1.75	1.70	1.73	1.70
3	3.01	2.98	2.85	2.78	1.90	1.85	1.28	1.27	1.74	1.66	1.76	1.73
4	3.09	3.01	2.90	2.85	1.92	1.90	1.32	1.28	---	---	1.76	1.74
5	3.17	3.09	2.93	2.88	1.91	1.11	1.32	1.08	---	---	1.76	1.76
6	3.23	3.17	2.88	1.39	1.17	1.11	1.20	1.08	---	---	---	---
7	3.29	3.23	1.53	1.39	1.27	1.17	1.27	1.20	---	---	---	---
8	3.33	3.29	1.67	1.53	1.31	1.27	1.30	1.27	---	---	---	---
9	3.37	3.33	1.76	1.67	1.36	1.31	1.33	1.29	---	---	---	---
10	3.40	3.37	1.81	1.76	1.35	1.27	1.42	1.33	---	---	1.70	1.68
11	3.42	3.36	1.85	1.81	1.27	1.11	1.45	1.41	1.13	1.08	1.73	1.70
12	3.42	3.35	1.87	1.74	1.19	1.12	1.42	1.41	1.13	1.13	1.82	1.73
13	3.49	3.42	1.74	1.34	1.24	1.19	1.45	1.39	1.17	1.13	1.92	1.82
14	3.49	3.30	1.70	1.56	1.23	0.83	1.48	1.40	1.21	1.17	1.94	1.92
15	3.30	3.09	1.81	1.70	1.07	0.89	1.52	1.39	1.25	1.21	1.98	1.93
16	3.31	3.21	1.87	1.81	1.09	1.07	1.58	1.52	1.34	1.25	1.98	1.94
17	3.37	3.31	1.97	1.87	1.09	1.04	1.62	1.58	1.36	1.34	1.94	1.55
18	3.43	3.37	1.99	1.97	1.11	1.05	1.59	1.01	1.35	1.30	1.64	1.59
19	3.51	3.43	---	---	1.15	1.11	1.20	1.05	1.33	1.30	1.64	1.49
20	3.53	3.51	---	---	1.23	1.15	1.30	1.20	1.34	1.30	1.56	1.51
21	3.55	3.51	---	---	1.25	1.23	1.36	1.30	1.40	1.30	1.66	1.51
22	3.60	3.55	---	---	1.27	1.25	1.39	1.33	1.44	1.40	1.78	1.66
23	3.67	3.60	---	---	1.29	1.27	1.46	1.39	1.47	1.44	1.84	1.78
24	3.72	3.67	---	---	1.29	1.09	1.55	1.46	1.48	1.47	1.90	1.84
25	3.73	3.72	---	---	1.09	1.09	1.61	1.55	1.56	1.48	1.93	1.90
26	3.75	3.73	1.65	1.60	1.09	1.09	1.61	1.60	1.57	1.56	2.01	1.93
27	3.74	3.59	1.68	1.65	1.12	1.09	1.61	1.29	1.62	1.57	2.05	2.01
28	3.59	3.47	1.67	1.39	1.15	1.12	1.38	1.29	1.65	1.62	2.10	2.05
29	3.47	2.41	1.63	1.39	1.16	1.15	1.44	1.38	1.67	1.65	2.12	2.10
30	2.55	2.42	---	---	1.23	1.15	1.50	1.44	---	---	---	---
31	2.63	2.55	---	---	1.23	1.22	1.64	1.50	---	---	---	---
MONTH	3.75	2.41	2.93	1.34	1.92	0.83	1.64	1.01	1.75	1.08	2.12	1.49

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	4.87	4.81	---	---	---	---
2	---	---	---	---	3.40	3.31	4.91	4.87	---	---	---	---
3	---	---	---	---	3.49	3.40	4.99	4.91	---	---	---	---
4	---	---	---	---	3.52	3.49	5.04	4.99	---	---	---	---
5	---	---	---	---	3.52	3.46	5.11	5.04	---	---	---	---
6	2.07	2.01	---	---	3.47	3.46	5.19	5.11	---	---	---	---
7	2.12	2.06	---	---	3.55	3.47	5.25	5.19	---	---	---	---
8	2.19	2.12	---	---	3.63	3.55	5.32	5.25	---	---	---	---
9	2.26	2.19	---	---	3.68	3.63	5.39	5.32	---	---	---	---
10	2.31	2.26	---	---	3.77	3.68	5.46	5.39	---	---	---	---
11	2.31	2.25	---	---	3.77	3.77	5.50	5.46	5.57	5.48	---	---
12	2.25	1.82	2.51	2.41	3.85	3.77	5.54	5.50	5.65	5.57	---	---
13	---	---	2.64	2.51	3.86	3.85	5.54	5.53	5.69	5.65	5.63	5.57
14	---	---	2.72	2.64	3.95	3.86	5.53	5.53	5.69	5.69	5.66	5.63
15	---	---	2.84	2.72	4.02	3.95	5.54	5.53	5.69	5.66	5.68	5.66
16	---	---	2.92	2.84	4.05	3.99	5.60	5.54	---	---	5.69	5.68
17	---	---	2.94	2.92	3.99	3.99	5.65	5.60	---	---	5.69	5.69
18	---	---	2.93	2.93	4.05	3.99	5.68	5.65	---	---	5.72	5.69
19	---	---	2.95	2.93	4.13	4.05	5.68	5.67	---	---	5.72	5.72
20	---	---	2.97	2.95	4.20	4.13	5.72	5.67	---	---	5.90	5.72
21	---	---	3.05	2.97	4.22	4.20	5.77	5.72	---	---	5.90	5.90
22	---	---	3.13	3.05	4.33	4.22	5.84	5.77	---	---	5.91	5.90
23	---	---	3.21	3.13	4.36	4.33	5.89	5.84	---	---	5.96	5.91
24	---	---	3.32	3.21	4.45	4.36	5.89	5.89	---	---	6.00	5.96
25	---	---	---	---	4.52	4.45	5.94	5.89	---	---	6.02	6.00
26	---	---	---	---	4.55	4.52	5.94	5.94	---	---	6.02	6.02
27	---	---	---	---	4.59	4.55	5.94	5.94	---	---	6.07	6.02
28	---	---	---	---	4.68	4.59	6.02	5.94	---	---	6.07	6.07
29	---	---	---	---	4.75	4.68	6.02	6.02	---	---	6.14	6.07
30	---	---	---	---	4.81	4.75	6.02	6.02	---	---	6.14	6.14
31	---	---	---	---	---	---	6.09	6.02	---	---	---	---
MONTH	2.31	1.82	3.32	2.41	4.81	3.31	6.09	4.81	5.69	5.48	6.14	5.57
YEAR	6.14	0.83										

Daily Low Water Levels



SUSSEX COUNTY--Continued

WELL NUMBER.--Of13-09. SITE ID.--384406075224603. PERMIT NUMBER.--97469.

LOCATION.--Lat 38°44'06", long 75°22'46", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 80 ft; casing diameter 2 in., to 77 ft; screen diameter 2 in., screened from 77 to 80 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.82 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.30 ft above land surface.

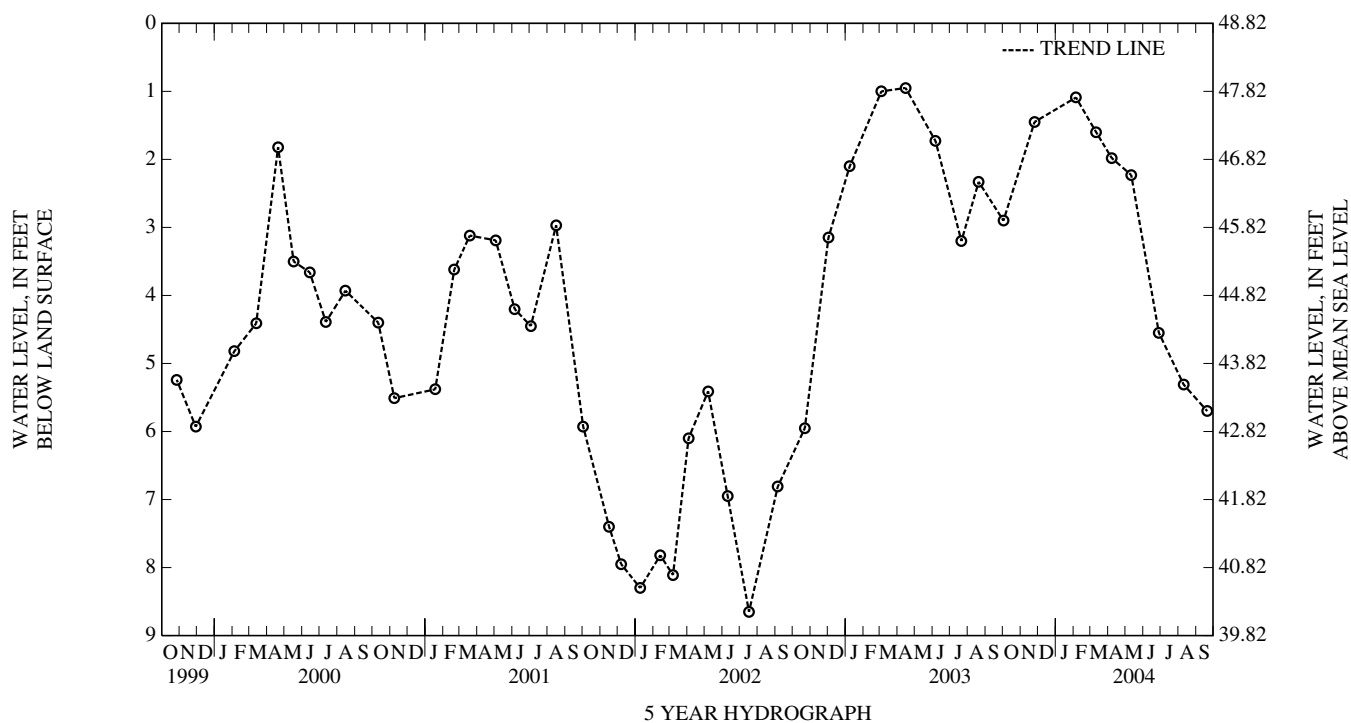
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.60 ft below land surface, April 18, 1994; lowest measured, 9.53 ft below land surface, October 26, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.90	MAR 11, 2004	1.60	JUN 28, 2004	4.55
NOV 25	1.45	APR 07	1.98	AUG 10	5.31
FEB 05, 2004	1.09	MAY 11	2.23	SEP 20	5.70
HIGHEST	1.09	FEB 05, 2004			
LOWEST	5.70	SEP 20, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of13-10. SITE ID.--384406075224602. PERMIT NUMBER.--95789.

LOCATION.--Lat 38°44'06", long 75°22'46", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 48 ft; casing diameter 2 in., to 45 ft; screen diameter 2 in., screened from 43 to 45 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.86 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.43 ft above land surface.

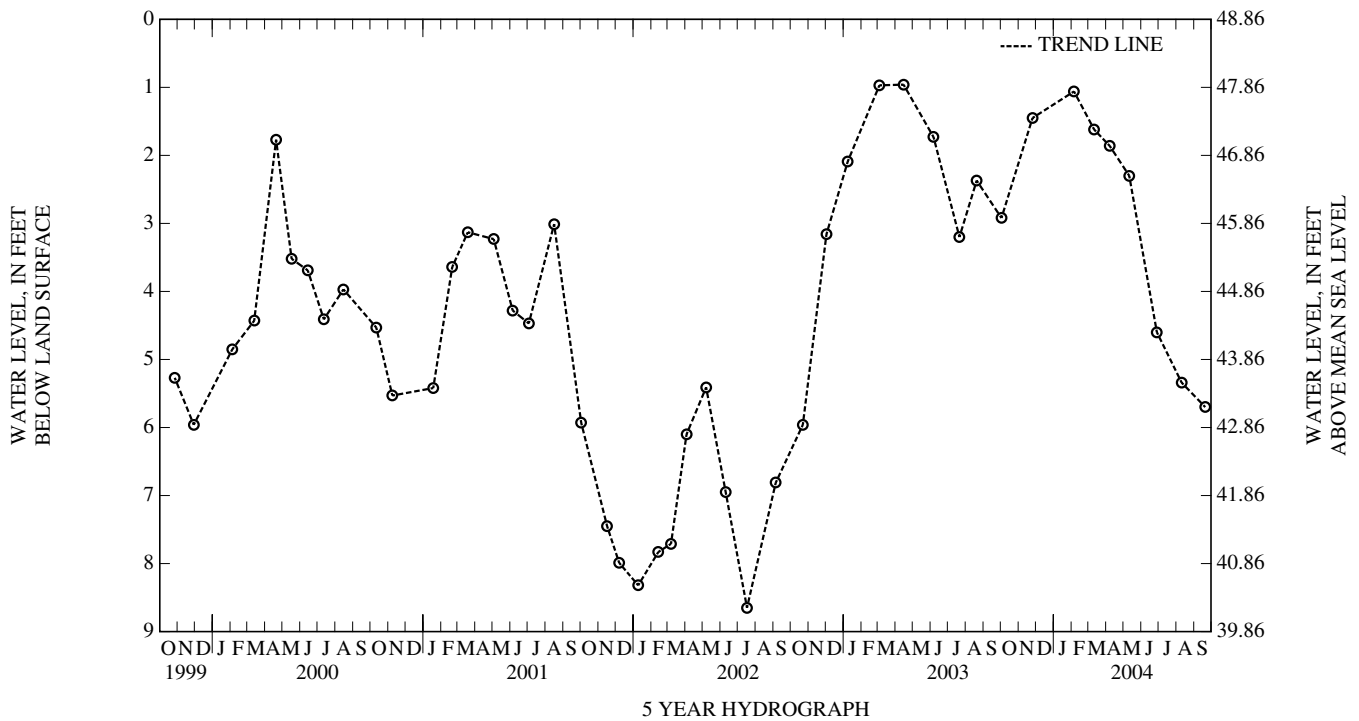
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.59 ft below land surface, April 18, 1994; lowest measured, 9.24 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.92	MAR 11, 2004	1.62	JUN 28, 2004	4.60
NOV 25	1.45	APR 07	1.86	AUG 10	5.34
FEB 05, 2004	1.06	MAY 11	2.30	SEP 20	5.70
HIGHEST	1.06	FEB 05, 2004			
LOWEST	5.70	SEP 20, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of13-11. SITE ID.--384406075224401. PERMIT NUMBER.--95788.

LOCATION.--Lat 38°44'06", long 75°22'44", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.67 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.12 ft above land surface.

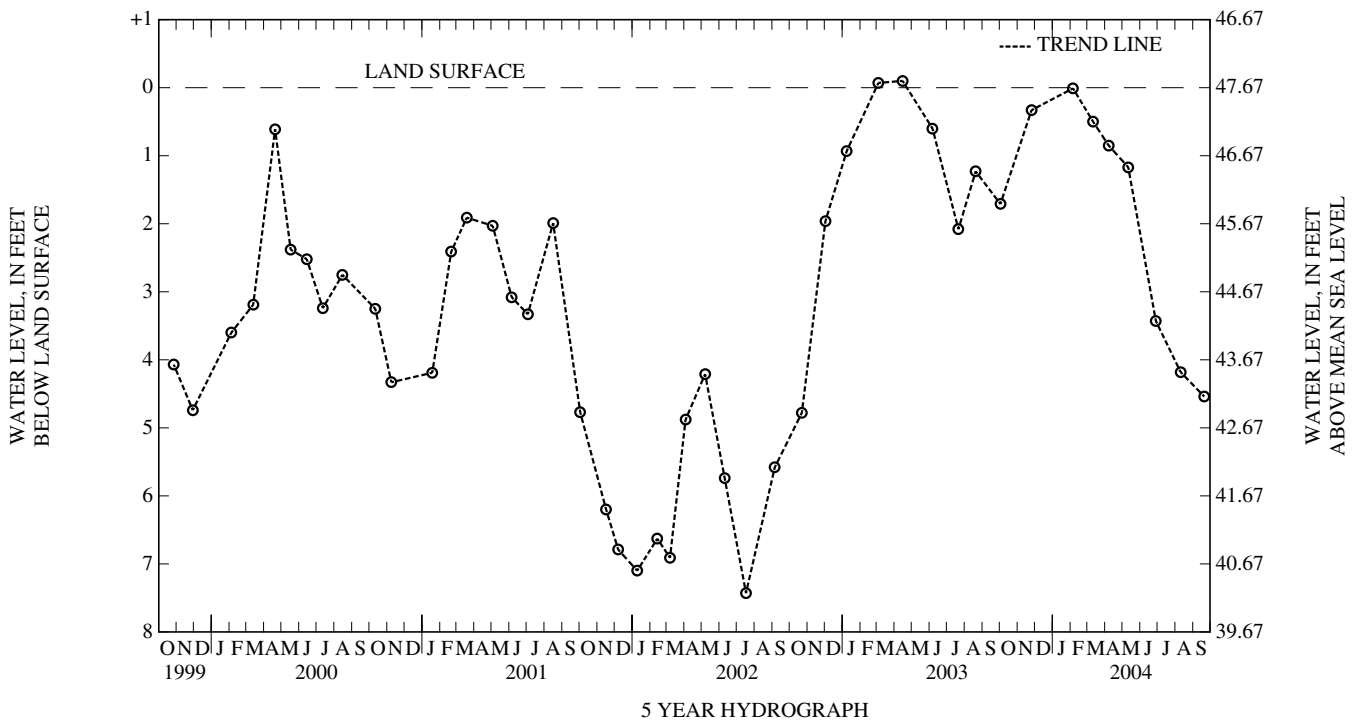
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.56 ft above land surface, April 18, 1994; lowest measured, 7.98 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.71	MAR 11, 2004	.50	JUN 28, 2004	3.43
NOV 25	.33	APR 07	.85	AUG 10	4.18
FEB 05, 2004	.01	MAY 11	1.17	SEP 20	4.54
HIGHEST	.01	FEB 05, 2004			
LOWEST	4.54	SEP 20, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of22-02. SITE ID.--384343075230402. PERMIT NUMBER.--95785.

LOCATION.--Lat 38°43'43", long 75°23'04", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 56 ft; casing diameter 2 in., to 53 ft; screen diameter 2 in., screened from 53 to 56 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.36 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.18 ft above land surface.

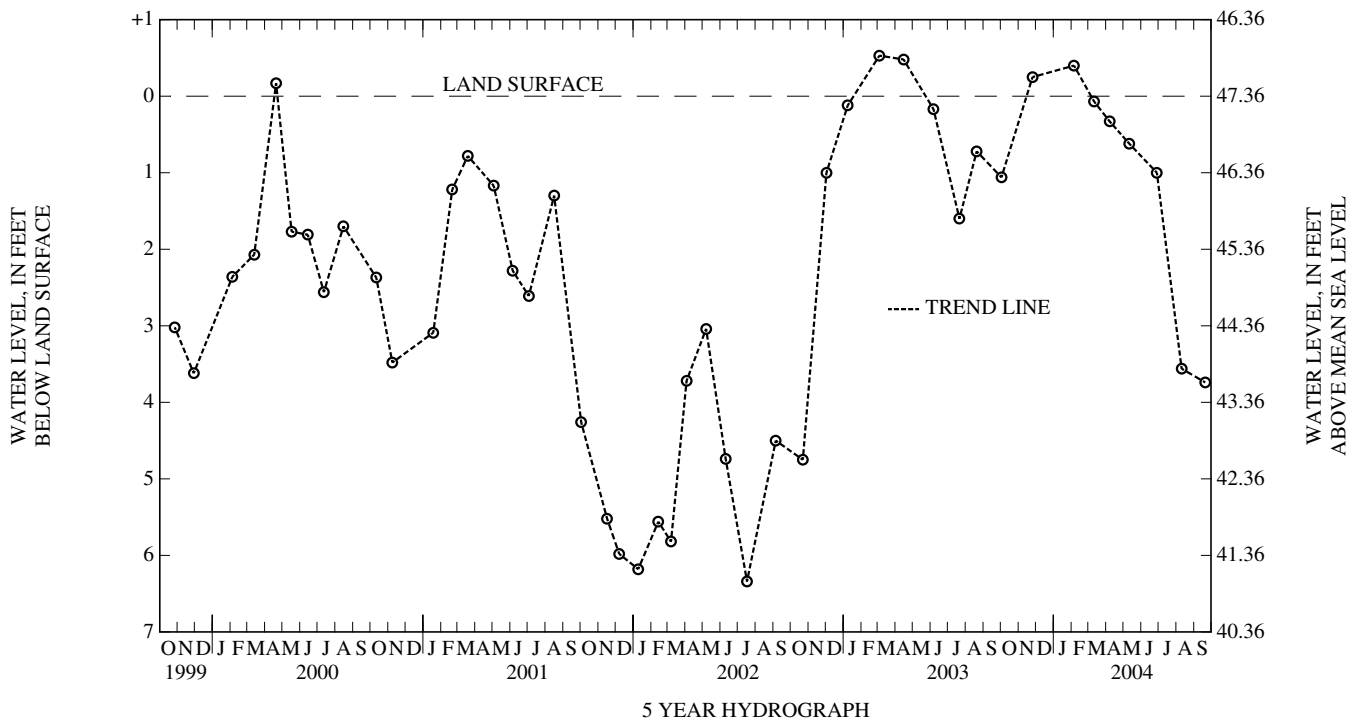
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.60 ft above land surface, March 22, 1994; lowest measured, 7.07 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.06	MAR 11, 2004	.07	JUN 28, 2004	1.00
NOV 25	+.25	APR 07	.33	AUG 10	3.56
FEB 05, 2004	+.40	MAY 11	.62	SEP 20	3.74
HIGHEST	+.40	FEB 05, 2004			
LOWEST	3.74	SEP 20, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of22-03. SITE ID.--384343075230403. PERMIT NUMBER.--95798.

LOCATION.--Lat 38°43'43", long 75°23'04", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 118 ft; casing diameter 2 in., to 96 ft; screen diameter 2 in., screened from 96 to 99 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.41 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.38 ft above land surface.

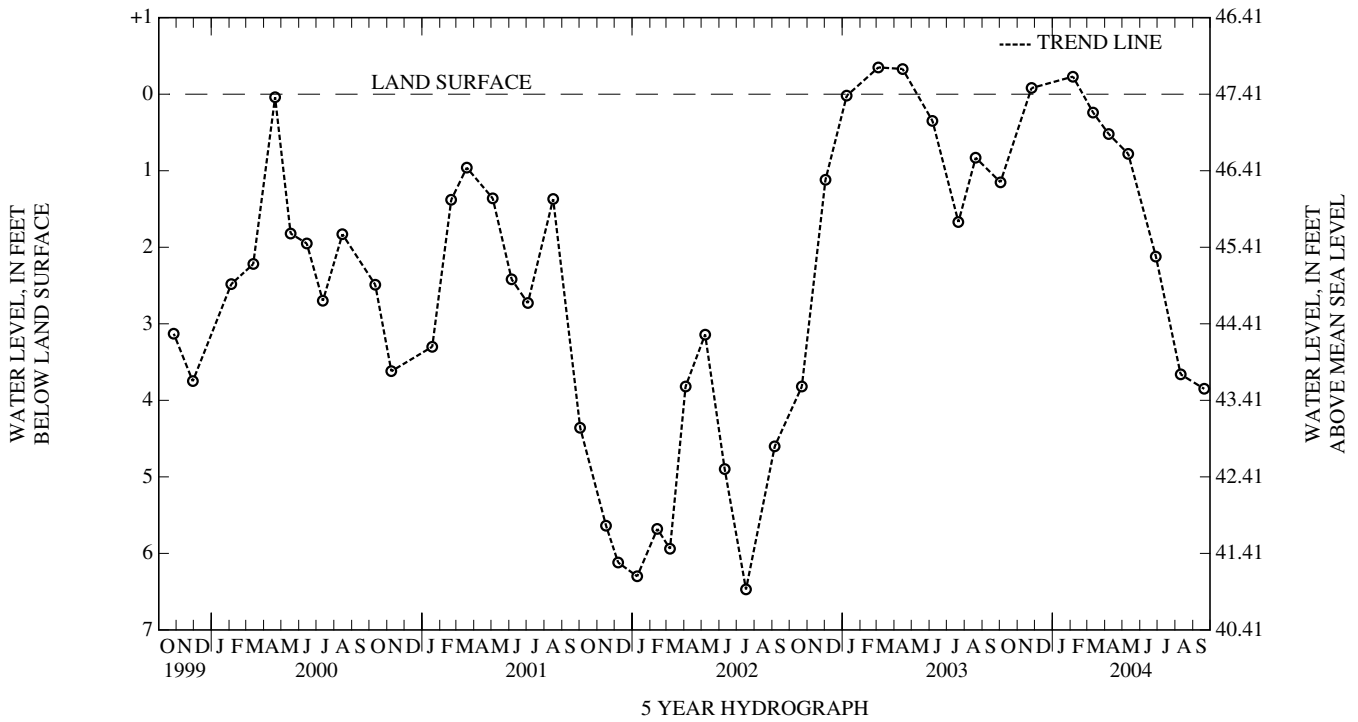
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.47 ft above land surface, March 22, 1994; lowest measured, 7.19 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.15	MAR 11, 2004	.24	JUN 28, 2004	2.12
NOV 25	+.08	APR 07	.52	AUG 10	3.66
FEB 05, 2004	+.23	MAY 11	.78	SEP 20	3.85
HIGHEST	+.23	FEB 05, 2004			
LOWEST	3.85	SEP 20, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY---Continued

WELL NUMBER.--Of22-04. SITE ID.--384343075230401. PERMIT NUMBER.--95800.

LOCATION.--Lat 38°43'43", long 75°23'04", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 15 ft; casing diameter 2 in., to 12 ft; screen diameter 2 in., screened from 12 to 15 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 47.62 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.68 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.75 ft above land surface, March 3, 1994 (recorder); lowest measured, 7.72 ft below land surface, December 4, 1998.

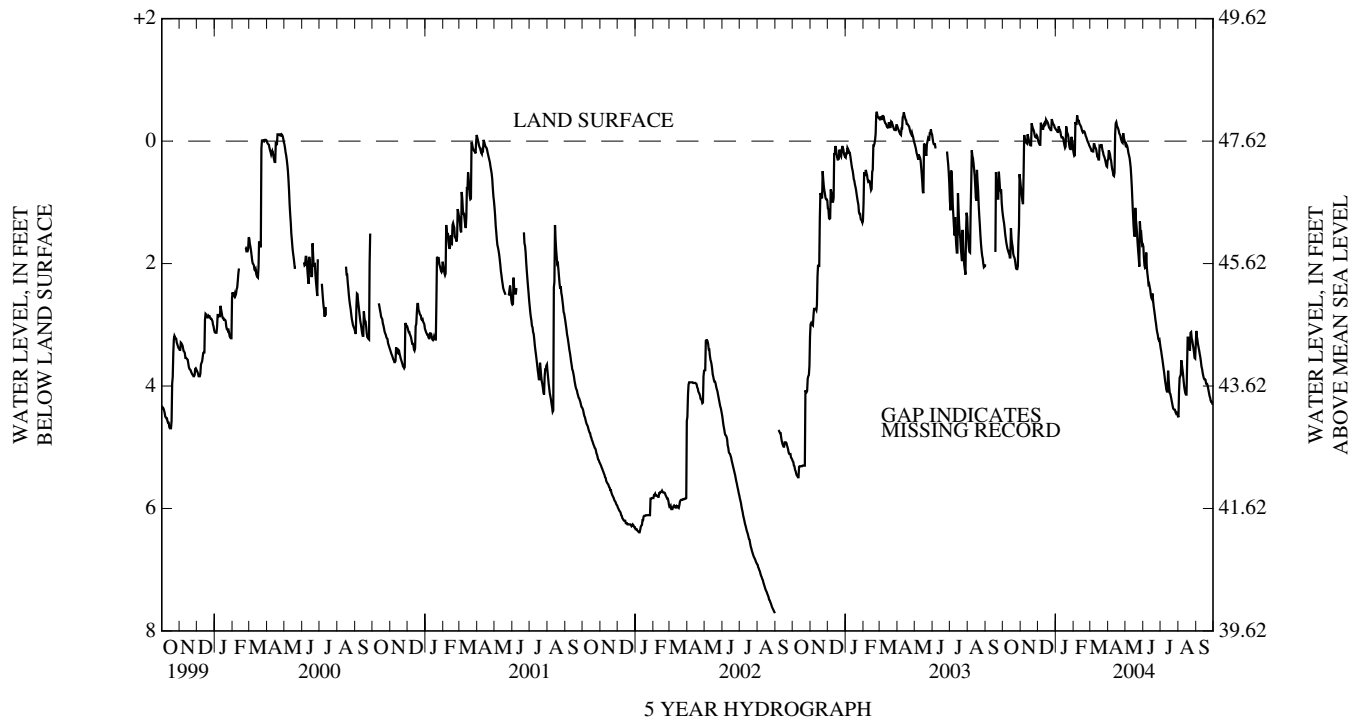
WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.18	MAR 11, 2004	.12	JUN 28, 2004	3.22
NOV 25	+1.17	APR 07	.35	AUG 10	3.82
FEB 05, 2004	+2.28	MAY 11	.47	SEP 20	3.94
HIGHEST	+2.28	FEB 05, 2004			
LOWEST	3.94	SEP 20, 2004			

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1.21	1.13	0.73	0.63	-0.02	-0.07	-0.19	-0.21	0.20	0.14	0.11	0.09
2	1.28	1.16	0.82	0.73	0.02	-0.02	-0.18	-0.19	0.24	0.20	0.13	0.10
3	1.34	1.28	0.91	0.82	0.04	0.02	-0.17	-0.19	0.23	-0.36	0.16	0.13
4	1.42	1.33	0.98	0.91	0.06	0.04	-0.15	-0.17	-0.31	-0.36	0.16	0.13
5	1.52	1.42	1.03	0.53	0.06	-0.30	-0.15	-0.28	-0.28	-0.31	0.17	0.15
6	1.59	1.52	0.53	-0.13	-0.30	-0.33	-0.24	-0.28	-0.28	-0.51	0.17	-0.02
7	1.66	1.59	-0.10	-0.12	-0.25	-0.30	-0.20	-0.24	-0.42	-0.51	0.05	0.02
8	1.71	1.66	-0.04	-0.10	-0.22	-0.25	-0.18	-0.20	-0.35	-0.42	0.05	0.01
9	1.76	1.71	-0.01	-0.04	-0.20	-0.22	-0.15	-0.18	-0.33	-0.35	0.09	0.05
10	1.79	1.76	0.01	-0.01	-0.20	-0.27	-0.09	-0.15	-0.33	-0.35	0.11	0.09
11	1.82	1.63	0.03	0.01	-0.27	-0.43	-0.06	-0.09	-0.28	-0.33	0.13	0.11
12	1.81	1.63	0.04	-0.15	-0.29	-0.35	-0.06	-0.09	-0.27	-0.28	0.19	0.13
13	1.90	1.81	-0.11	-0.18	-0.26	-0.29	-0.06	-0.09	-0.25	-0.27	0.25	0.19
14	1.90	1.22	-0.07	-0.11	-0.27	-0.48	-0.04	-0.07	-0.23	-0.25	0.25	0.25
15	1.42	1.11	-0.02	-0.07	-0.35	-0.44	0.02	-0.08	-0.19	-0.23	0.30	0.25
16	1.59	1.42	0.02	-0.02	-0.33	-0.35	0.07	0.02	-0.16	-0.19	0.30	0.03
17	1.67	1.59	0.06	0.02	-0.32	-0.37	0.11	0.07	-0.14	-0.16	0.08	0.04
18	1.73	1.67	0.07	0.06	-0.30	-0.35	0.09	-0.30	-0.15	-0.19	0.09	0.08
19	1.84	1.73	0.07	-0.29	-0.27	-0.30	-0.24	-0.29	-0.16	-0.18	0.09	-0.01
20	1.88	1.84	-0.29	-0.33	-0.23	-0.27	-0.17	-0.24	-0.15	-0.18	0.05	0.01
21	1.90	1.81	-0.25	-0.29	-0.21	-0.23	-0.13	-0.17	-0.12	-0.17	0.09	0.01
22	1.94	1.90	-0.21	-0.25	-0.20	-0.21	-0.11	-0.15	-0.08	-0.12	0.15	0.09
23	2.01	1.94	-0.19	-0.21	-0.18	-0.20	-0.05	-0.11	-0.06	-0.08	0.18	0.15
24	2.08	2.01	-0.16	-0.19	-0.18	-0.47	0.05	-0.05	-0.03	-0.06	0.23	0.18
25	2.09	2.08	-0.11	-0.18	-0.36	-0.42	0.11	0.05	0.00	-0.03	0.25	0.23
26	2.09	2.04	-0.07	-0.11	-0.32	-0.36	0.13	0.11	0.02	0.00	0.28	0.25
27	2.04	1.56	-0.06	-0.07	-0.29	-0.32	0.13	-0.07	0.04	0.01	0.32	0.28
28	1.64	1.39	-0.06	-0.15	-0.27	-0.29	-0.07	-0.10	0.07	0.04	0.37	0.32
29	1.39	0.37	-0.09	-0.15	-0.26	-0.27	-0.03	-0.07	0.09	0.07	0.41	0.37
30	0.54	0.40	-0.07	-0.09	-0.22	-0.26	0.02	-0.03	---	---	0.42	0.31
31	0.63	0.54	---	---	-0.21	-0.22	0.14	0.02	---	---	0.31	0.29
MONTH	2.09	0.37	1.03	-0.33	0.06	-0.48	0.14	-0.30	0.24	-0.51	0.42	-0.02

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	0.30	0.12	0.06	0.01	1.72	1.38	3.38	3.31	4.51	4.09	3.10	3.03
2	0.15	0.12	0.10	0.06	1.90	1.72	3.43	3.38	4.09	3.87	3.19	3.10
3	0.18	0.15	0.06	0.00	2.03	1.89	3.50	3.43	3.87	3.79	3.25	3.19
4	0.21	0.17	0.08	0.01	2.07	2.03	3.56	3.50	3.84	3.78	3.32	3.25
5	0.28	0.21	0.13	0.07	2.06	1.73	3.63	3.56	3.82	3.58	3.37	3.32
6	0.32	0.28	0.19	0.13	1.82	1.72	3.70	3.63	3.58	3.56	3.42	3.37
7	0.40	0.32	0.23	0.19	2.05	1.82	3.77	3.70	3.65	3.57	3.48	3.42
8	0.46	0.40	0.27	0.20	2.16	2.05	3.85	3.77	3.73	3.65	3.53	3.48
9	0.50	0.46	0.34	0.27	2.24	2.16	3.93	3.85	3.81	3.73	3.60	3.53
10	0.56	0.50	0.43	0.34	2.34	2.23	3.99	3.93	3.92	3.81	3.68	3.60
11	0.57	0.45	0.58	0.43	2.33	2.21	4.06	3.99	4.01	3.92	3.72	3.68
12	0.51	-0.11	0.75	0.58	2.38	2.19	4.09	4.06	4.07	4.01	3.78	3.72
13	-0.11	-0.31	0.98	0.75	2.43	2.38	4.09	3.71	4.12	4.07	3.83	3.78
14	-0.29	-0.35	1.18	0.98	2.51	2.43	3.75	3.70	4.14	4.12	3.87	3.83
15	-0.31	-0.36	1.38	1.18	2.56	2.50	3.90	3.75	4.14	3.65	3.89	3.87
16	-0.26	-0.31	1.51	1.37	2.58	2.31	4.03	3.90	3.65	3.21	3.89	3.88
17	-0.23	-0.26	1.56	0.75	2.49	2.31	4.12	4.03	3.21	3.17	3.90	3.89
18	-0.21	-0.24	1.09	0.78	2.61	2.45	4.13	4.12	3.21	3.17	3.96	3.90
19	-0.18	-0.21	1.27	1.09	2.70	2.60	4.18	4.13	3.28	3.21	3.96	3.94
20	-0.13	-0.18	1.37	1.27	2.77	2.70	4.23	4.18	3.36	3.28	3.97	3.95
21	-0.11	-0.13	1.50	1.36	2.84	2.77	4.28	4.23	3.42	3.13	4.01	3.97
22	-0.09	-0.11	1.66	1.48	2.92	2.84	4.33	4.28	3.13	3.03	4.06	4.01
23	-0.04	-0.09	1.79	1.65	2.98	2.92	4.37	4.33	3.12	3.05	4.11	4.06
24	-0.01	-0.06	1.91	1.78	3.06	2.98	4.38	4.37	3.22	3.12	4.16	4.11
25	0.02	-0.01	2.05	1.15	3.12	3.06	4.39	4.38	3.26	3.22	4.19	4.16
26	0.03	-0.15	1.31	1.13	3.16	3.06	4.39	4.37	3.32	3.26	4.24	4.19
27	-0.13	-0.17	1.47	1.31	3.23	3.16	4.43	4.39	3.38	3.32	4.26	4.24
28	-0.06	-0.13	1.47	0.99	3.25	3.13	4.45	4.43	3.45	3.38	4.26	4.26
29	-0.02	-0.06	1.59	1.26	3.24	3.17	4.44	4.41	3.54	3.45	4.29	4.26
30	0.01	-0.02	1.70	1.59	3.31	3.24	4.46	4.42	3.55	3.34	4.29	4.29
31	---	---	1.69	1.33	---	---	4.49	4.46	3.34	3.04	---	---
MONTH	0.57	-0.36	2.05	0.00	3.31	1.38	4.49	3.31	4.51	3.03	4.29	3.03
YEAR	4.51	-0.51										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY—Continued

WELL NUMBER.--Of22-05. SITE ID.--384343075230301. PERMIT NUMBER.--95786.

LOCATION.--Lat 38°43'43", long 75°23'03", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.29 ft above land surface.

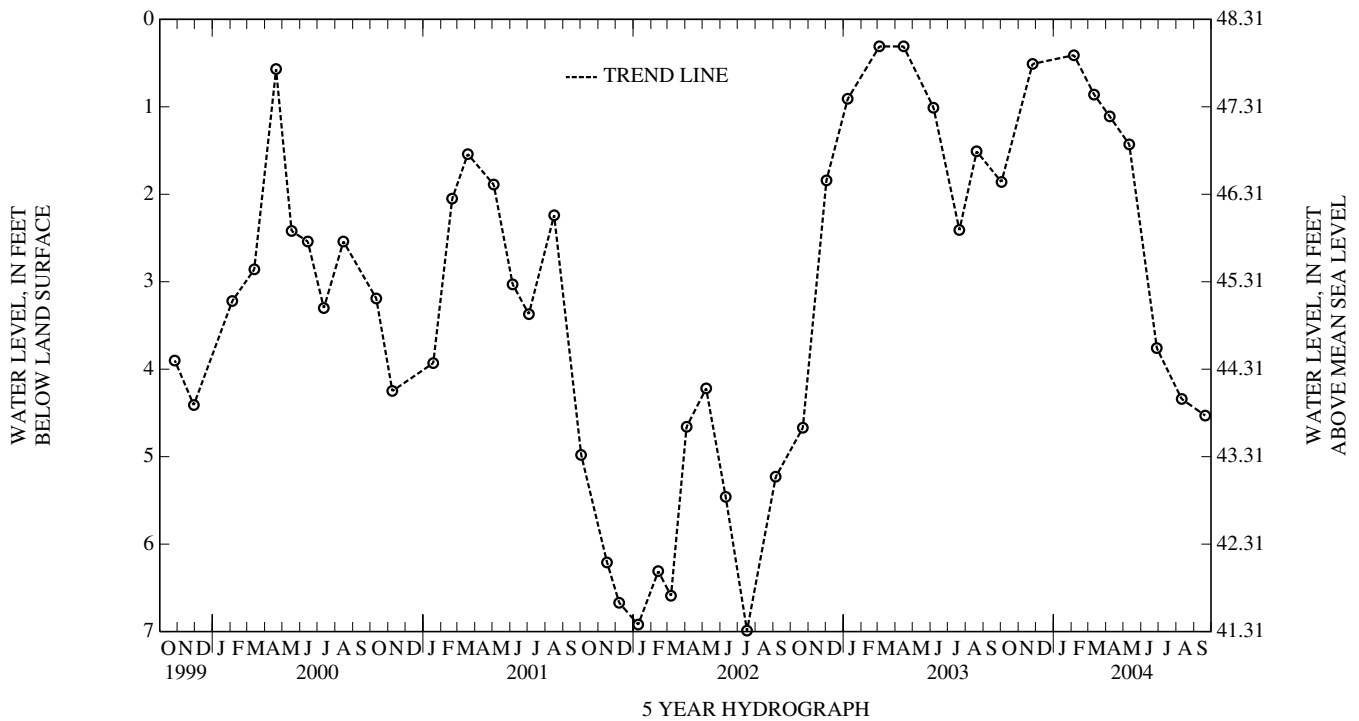
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.24 ft below land surface, February 25, 1998; lowest measured, 7.72 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.86	MAR 11, 2004	.86	JUN 28, 2004	3.76
NOV 25	.51	APR 07	1.11	AUG 10	4.34
FEB 05, 2004	.41	MAY 11	1.43	SEP 20	4.53
HIGHEST	.41	FEB 05, 2004			
LOWEST	4.53	SEP 20, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of22-06. SITE ID.--384343075230201. PERMIT NUMBER.--95797.

LOCATION.--Lat 38°43'43", long 75°23'02", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.46 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.32 ft above land surface.

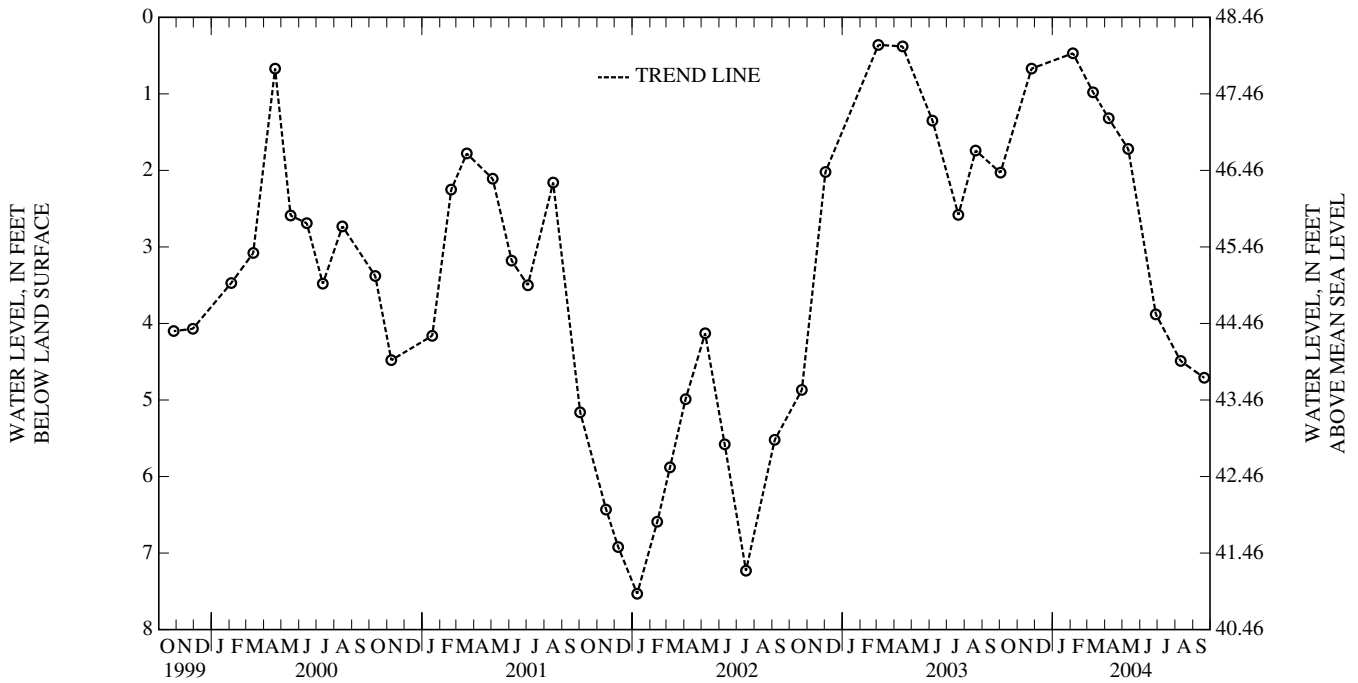
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.28 ft. below land surface, March 22, 1994; lowest measured, 8.00 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	2.03	MAR 11, 2004	.98	JUN 28, 2004	3.88
NOV 25	.67	APR 07	1.32	AUG 10	4.49
FEB 05, 2004	.47	MAY 11	1.72	SEP 20	4.71
HIGHEST	.47	FEB 05, 2004			
LOWEST	4.71	SEP 20, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of22-07. SITE ID.--384343075230101. PERMIT NUMBER.--95796.

LOCATION.--Lat 38°43'43", long 75°23'01", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.85 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.13 ft above land surface.

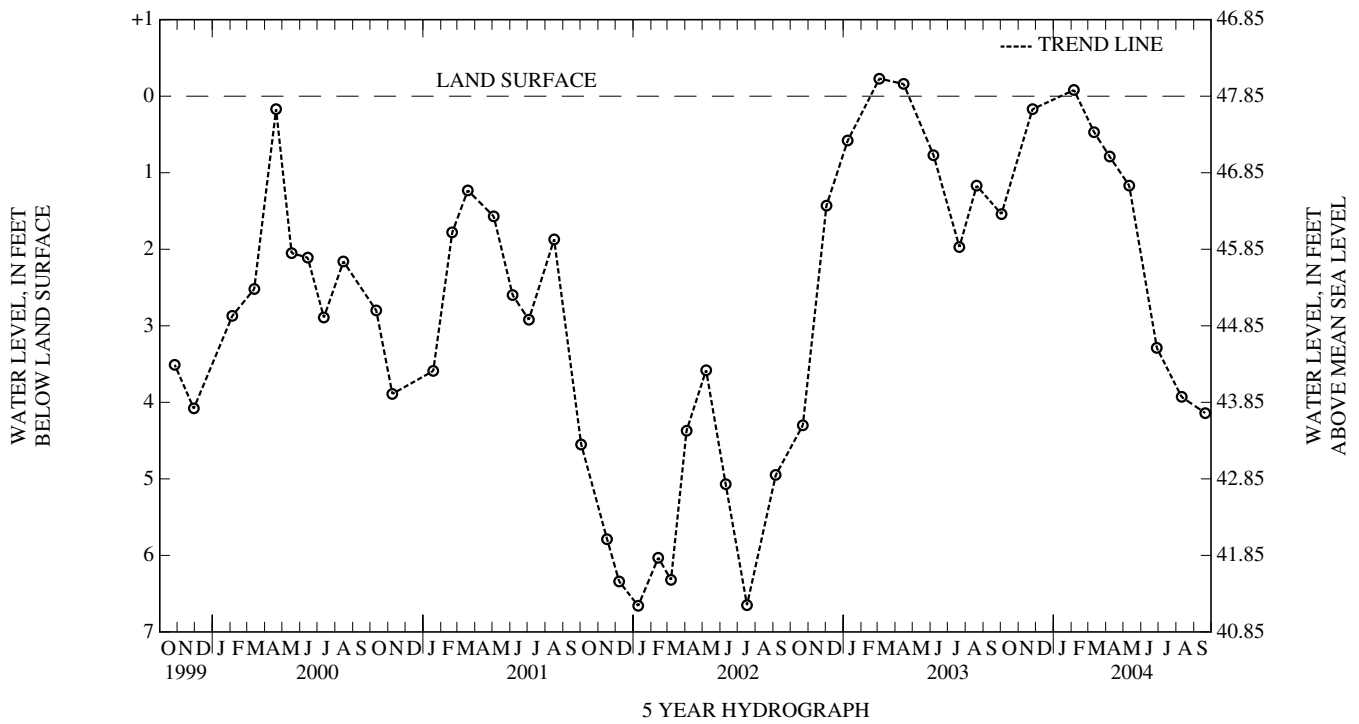
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.42 ft above land surface, February 25, 1998; lowest measured, 7.42 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.54	MAR 11, 2004	.47	JUN 28, 2004	3.29
NOV 25	.17	APR 07	.79	AUG 10	3.93
FEB 05, 2004	+0.08	MAY 11	1.17	SEP 20	4.14
HIGHEST	+0.08	FEB 05, 2004			
LOWEST	4.14	SEP 20, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of22-08. SITE ID.--384344075230301. PERMIT NUMBER.--95799.

LOCATION.--Lat 38°43'44", long 75°23'03", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.13 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 1.96 ft above land surface.

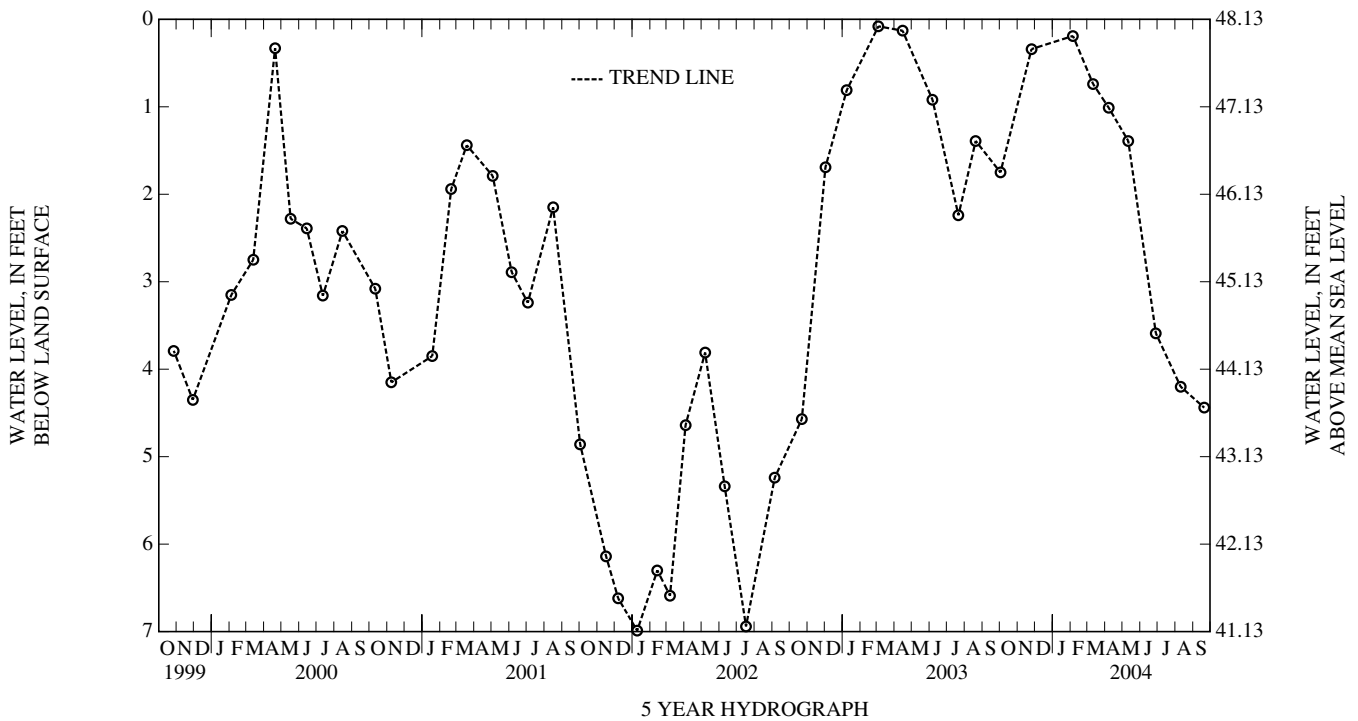
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.00 ft at land surface, February 25, 1998; lowest measured, 8.74 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.75	MAR 11, 2004	.74	JUN 28, 2004	3.59
NOV 25	.34	APR 07	1.01	AUG 10	4.20
FEB 05, 2004	.19	MAY 11	1.39	SEP 20	4.44
HIGHEST	.19	FEB 05, 2004			
LOWEST	4.44	SEP 20, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY—Continued

WELL NUMBER.--Of22-09. SITE ID.--384344075230102. PERMIT NUMBER.--95784.

LOCATION.--Lat 38°43'44", long 75°23'01", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 55 ft; casing diameter 2 in., to 52 ft; screen diameter 2 in., screened from 52 to 55 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.85 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.34 ft above land surface.

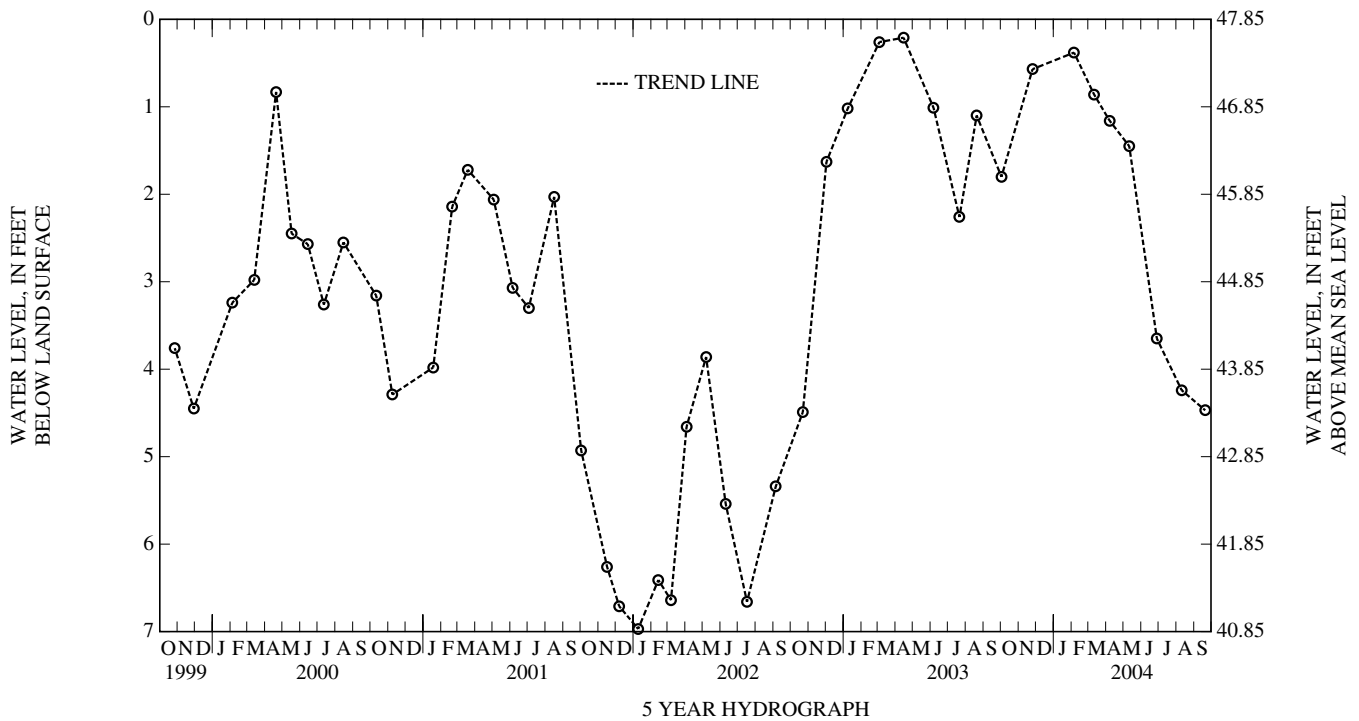
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.09 ft above land surface, March 22, 1994; lowest measured, 7.78 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.80	MAR 11, 2004	.86	JUN 28, 2004	3.65
NOV 25	.57	APR 07	1.16	AUG 10	4.24
FEB 05, 2004	.38	MAY 11	1.45	SEP 20	4.47
HIGHEST	.38	FEB 05, 2004			
LOWEST	4.47	SEP 20, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of22-10. SITE ID.--384341075230003. PERMIT NUMBER.--95777.

LOCATION.--Lat 38°43'41", long 75°23'00", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 118 ft; casing diameter 2 in., to 115 ft; screen diameter 2 in., screened from 115 to 118 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.20 ft above land surface.

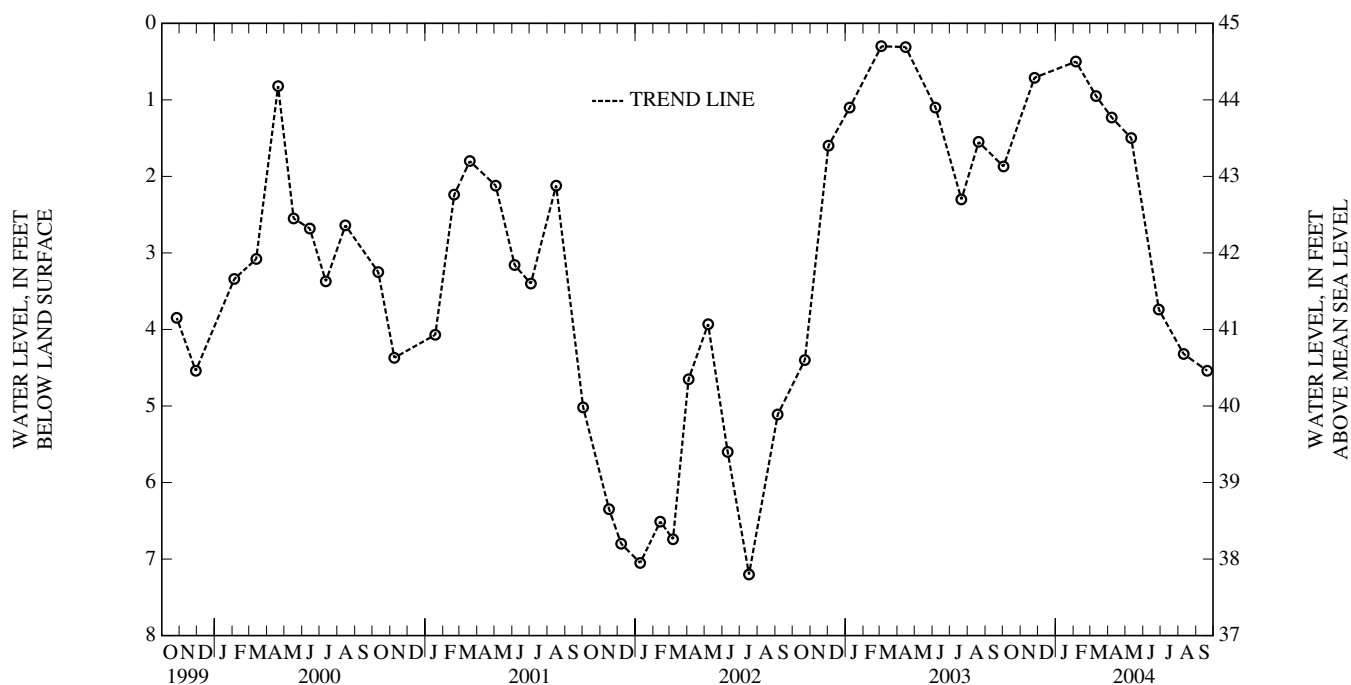
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.00 ft at land surface, March 22, 1994; lowest measured, 7.84 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.87	MAR 11, 2004	.95	JUN 28, 2004	3.74
NOV 25	.71	APR 07	1.23	AUG 10	4.32
FEB 05, 2004	.50	MAY 11	1.50	SEP 20	4.54
HIGHEST	.50	FEB 05, 2004			
LOWEST	4.54	SEP 20, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY---Continued

WELL NUMBER.--Of22-11. SITE ID.--384341075230001. PERMIT NUMBER.--95795.

LOCATION.--Lat 38°43'44", long 75°23'01", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., screened from 13 to 16 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to July 2001.

DATUM.--Altitude of land surface is 47.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.70 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.53 ft above land surface, March 3, 1994 (recorder); lowest measured, 7.52 ft below land surface, September 15, 1999 (recorder).

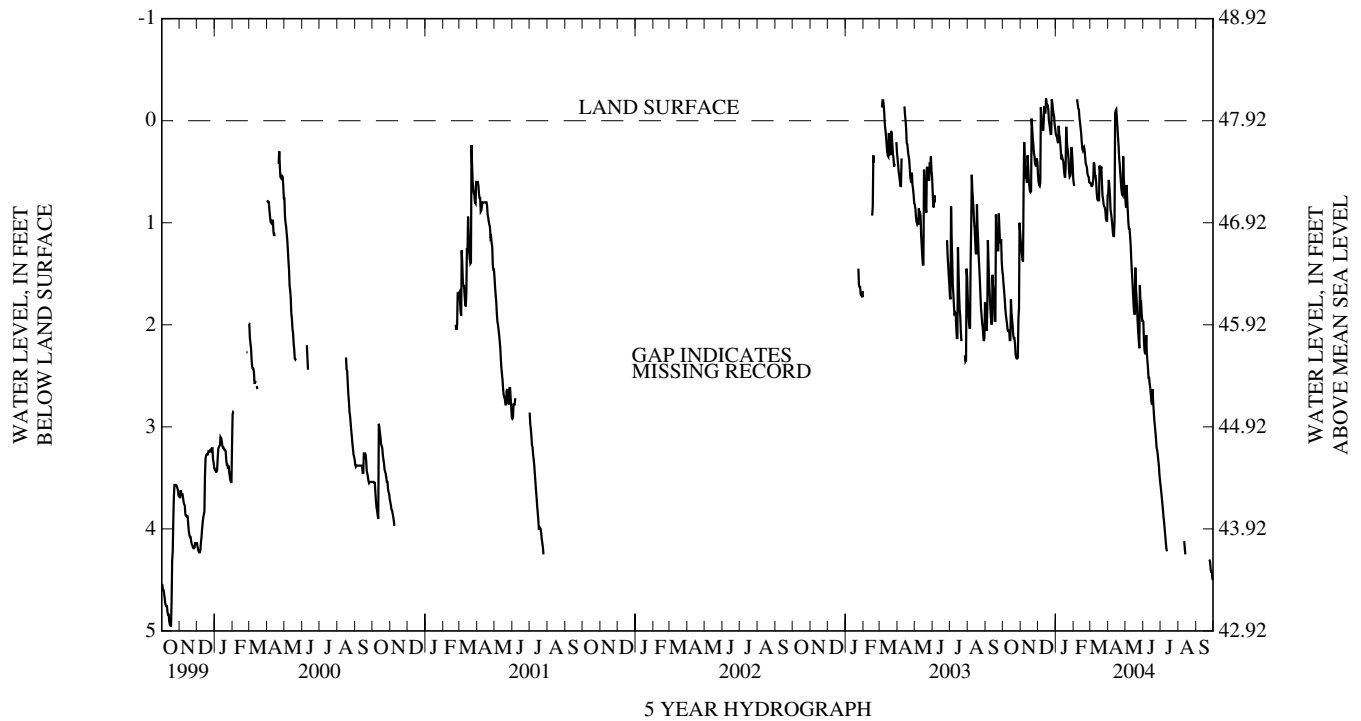
WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "-")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	1.53	MAR 11, 2004	.57	JUN 28, 2004	3.36
NOV 25	.32	APR 07	.88	AUG 10	3.98
FEB 05, 2004	.08	MAY 11	1.24	SEP 20	4.18
HIGHEST	.08	FEB 05, 2004			
LOWEST	4.18	SEP 20, 2004			

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1.51	1.46	1.18	1.10	0.53	0.41	0.13	0.08	0.61	0.55	0.61	0.61
2	1.59	1.51	1.24	1.18	0.60	0.52	0.15	0.12	0.64	0.57	0.62	0.52
3	1.66	1.59	1.30	1.24	0.63	0.60	0.16	0.14	---	---	0.64	0.62
4	1.73	1.65	1.36	1.30	0.64	0.61	0.20	0.16	---	---	0.64	0.54
5	1.82	1.73	1.38	0.66	0.61	-0.14	0.22	-0.04	---	---	0.62	0.55
6	1.89	1.82	0.66	-0.05	-0.13	-0.15	0.05	-0.04	---	---	0.57	0.15
7	1.94	1.89	0.21	0.01	-0.04	-0.13	0.14	0.05	-0.21	-0.28	0.41	0.32
8	1.98	1.94	0.39	0.21	0.04	-0.04	0.17	0.14	-0.16	-0.21	0.43	0.27
9	2.04	1.98	0.49	0.39	0.08	0.04	0.24	0.17	-0.12	-0.16	0.54	0.43
10	2.06	2.03	0.56	0.49	0.10	0.00	0.34	0.24	-0.11	-0.13	0.54	0.54
11	2.06	1.95	0.57	0.56	0.00	-0.28	0.38	0.34	-0.03	-0.11	0.60	0.54
12	2.06	1.95	0.61	0.28	-0.14	-0.21	0.36	0.34	0.02	-0.03	0.70	0.57
13	2.15	2.06	0.34	0.28	-0.08	-0.14	0.38	0.31	0.07	0.02	0.77	0.70
14	2.15	1.69	0.46	0.34	-0.08	-0.34	0.40	0.33	0.12	0.07	0.78	0.72
15	1.75	1.69	0.58	0.46	-0.22	-0.29	0.47	0.29	0.21	0.12	0.78	0.72
16	1.88	1.75	0.64	0.58	-0.17	-0.22	0.53	0.47	0.27	0.21	0.78	0.09
17	1.95	1.88	0.69	0.63	-0.16	-0.21	0.56	0.47	0.29	0.27	0.44	0.25
18	2.01	1.95	0.70	0.69	-0.15	-0.19	0.47	-0.06	0.27	0.17	0.49	0.44
19	2.10	2.01	0.69	-0.09	-0.10	-0.15	0.06	-0.06	0.26	0.20	0.49	0.16
20	2.13	2.10	-0.02	-0.11	0.00	-0.10	0.19	0.06	0.29	0.24	0.45	0.40
21	2.13	2.11	0.08	-0.02	0.04	0.00	0.26	0.19	0.36	0.24	0.59	0.40
22	2.18	2.13	0.18	0.08	0.08	0.04	0.30	0.23	0.42	0.36	0.73	0.59
23	2.28	2.18	0.24	0.18	0.13	0.08	0.37	0.30	0.44	0.42	0.77	0.73
24	2.32	2.28	0.32	0.24	0.13	-0.33	0.50	0.37	0.46	0.43	0.82	0.76
25	2.33	2.32	0.35	0.27	-0.21	-0.28	0.55	0.50	0.52	0.46	0.84	0.81
26	2.33	2.32	0.42	0.35	-0.17	-0.21	0.54	0.50	0.54	0.52	0.85	0.83
27	2.32	1.90	0.44	0.42	-0.11	-0.17	0.50	0.12	0.55	0.52	0.88	0.84
28	1.94	1.84	0.44	0.13	-0.07	-0.11	0.26	0.12	0.60	0.55	0.96	0.88
29	1.84	0.43	0.37	0.13	-0.04	-0.07	0.30	0.26	0.61	0.58	0.98	0.96
30	1.00	0.79	0.41	0.37	0.04	-0.04	0.40	0.30	---	---	0.98	0.62
31	1.10	1.00	---	---	0.08	0.04	0.55	0.40	---	---	0.73	0.60
MONTH	2.33	0.43	1.38	-0.11	0.64	-0.34	0.56	-0.06	0.64	-0.28	0.98	0.09

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	0.72	0.24	0.79	0.73	1.97	1.66	3.58	3.53	---	---	---	---
2	0.58	0.42	0.85	0.56	2.14	1.97	3.63	3.58	---	---	---	---
3	0.64	0.58	0.63	0.53	2.25	2.14	3.69	3.63	---	---	---	---
4	0.73	0.62	0.77	0.53	2.28	2.25	3.75	3.69	---	---	---	---
5	0.87	0.73	0.89	0.77	2.28	2.06	3.81	3.75	---	---	---	---
6	0.91	0.87	1.00	0.89	2.10	2.08	3.88	3.81	---	---	---	---
7	0.96	0.90	1.06	0.85	2.27	2.10	3.93	3.88	---	---	---	---
8	1.02	0.96	1.06	0.85	2.35	2.27	4.00	3.93	---	---	---	---
9	1.09	0.98	1.13	1.06	2.42	2.35	4.06	4.00	---	---	---	---
10	1.13	1.09	1.22	1.12	2.52	2.42	4.13	4.06	---	---	---	---
11	1.13	0.98	1.36	1.22	2.52	2.46	4.19	4.13	4.12	4.03	---	---
12	0.98	-0.07	1.47	1.36	2.58	2.46	4.22	4.12	4.19	4.12	---	---
13	-0.07	-0.14	1.57	1.46	2.62	2.58	---	---	4.25	4.18	---	---
14	-0.10	-0.15	1.68	1.56	2.68	2.62	---	---	---	---	---	---
15	-0.11	-0.15	1.80	1.67	2.75	2.68	---	---	---	---	---	---
16	-0.02	-0.11	1.88	1.79	2.78	2.53	---	---	---	---	---	---
17	0.06	-0.02	1.90	1.02	2.63	2.53	---	---	---	---	---	---
18	0.16	0.06	1.44	1.12	2.75	2.62	---	---	---	---	---	---
19	0.25	0.16	1.63	1.44	2.84	2.75	---	---	---	---	---	---
20	0.37	0.25	1.72	1.63	2.93	2.84	---	---	---	---	---	---
21	0.43	0.37	1.82	1.71	2.99	2.93	---	---	---	---	---	---
22	0.52	0.43	1.96	1.80	3.05	2.99	---	---	---	---	---	---
23	0.60	0.52	2.06	1.94	3.12	3.05	---	---	---	---	---	---
24	0.68	0.55	2.15	2.05	3.20	3.12	---	---	---	---	4.30	4.27
25	0.72	0.68	2.23	1.43	3.23	3.20	---	---	---	---	4.33	4.30
26	0.73	0.14	1.61	1.43	3.27	3.23	---	---	---	---	4.40	4.33
27	0.35	0.14	1.77	1.61	3.33	3.27	---	---	---	---	4.42	4.40
28	0.56	0.34	1.77	1.26	3.38	3.33	---	---	---	---	4.42	4.42
29	0.66	0.56	1.88	1.56	3.47	3.38	---	---	---	---	4.49	4.42
30	0.73	0.66	1.96	1.88	3.53	3.47	---	---	---	---	4.50	4.49
31	---	---	1.96	1.58	---	---	---	---	---	---	---	---
MONTH	1.13	-0.15	2.23	0.53	3.53	1.66	4.22	3.53	4.25	4.03	4.50	4.27
YEAR	4.50	-0.34										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY—Continued

WELL NUMBER.--Of23-01. SITE ID.--384338075222303. PERMIT NUMBER.--95775.

LOCATION.--Lat 38°43'33", long 75°22'29", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 99 ft; casing diameter 2 in., to 96 ft; screen diameter 2 in., screened from 96 to 99 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 51.22 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.38 ft above land surface.

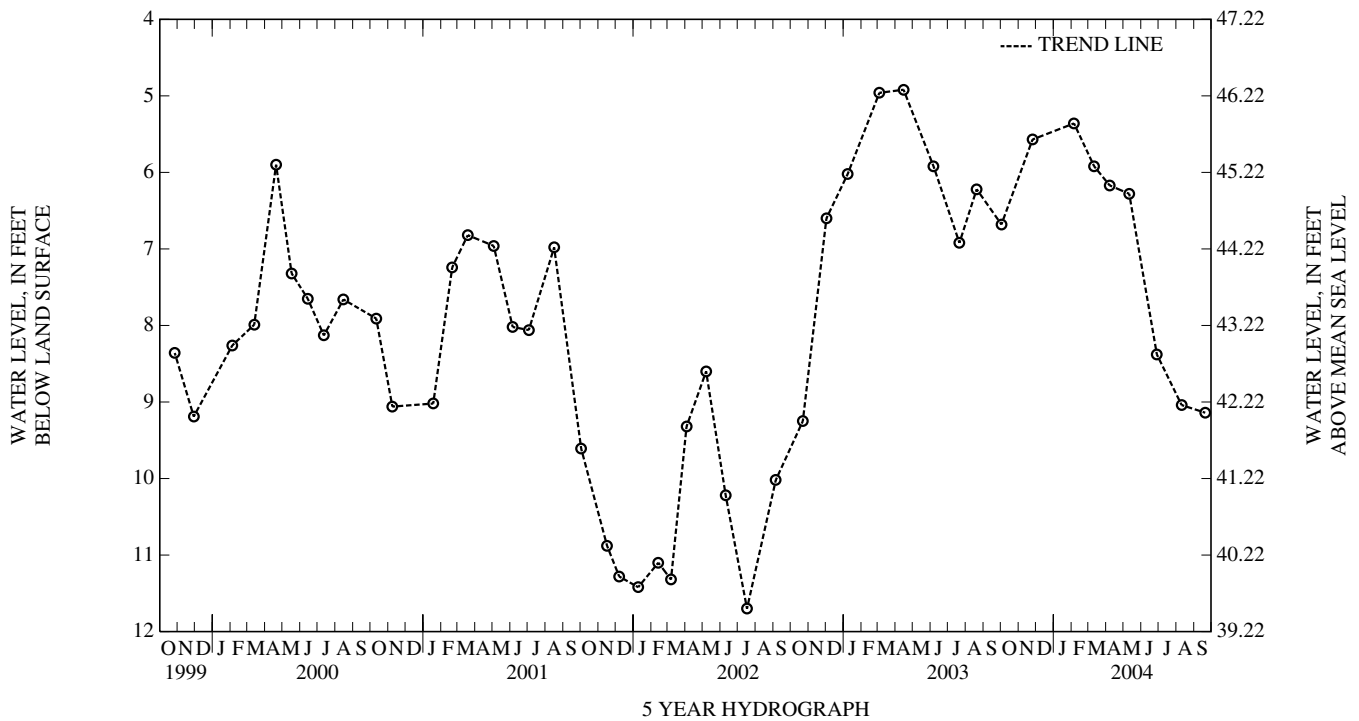
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.73 ft below land surface, February 25, 1998; lowest measured, 12.20 ft below land surface, October 14, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	6.68	MAR 11, 2004	5.92	JUN 28, 2004	8.38
NOV 25	5.57	APR 07	6.17	AUG 10	9.04
FEB 05, 2004	5.36	MAY 11	6.28	SEP 20	9.14
HIGHEST	5.36	FEB 05, 2004			
LOWEST	9.14	SEP 20, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of23-02. SITE ID.--384333075222902. PERMIT NUMBER.--95782.

LOCATION.--Lat 38°43'33", long 75°22'29", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 50 ft; casing diameter 2 in., to 47 ft; screen diameter 2 in., screened from 47 to 50 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 51.25 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.25 ft above land surface.

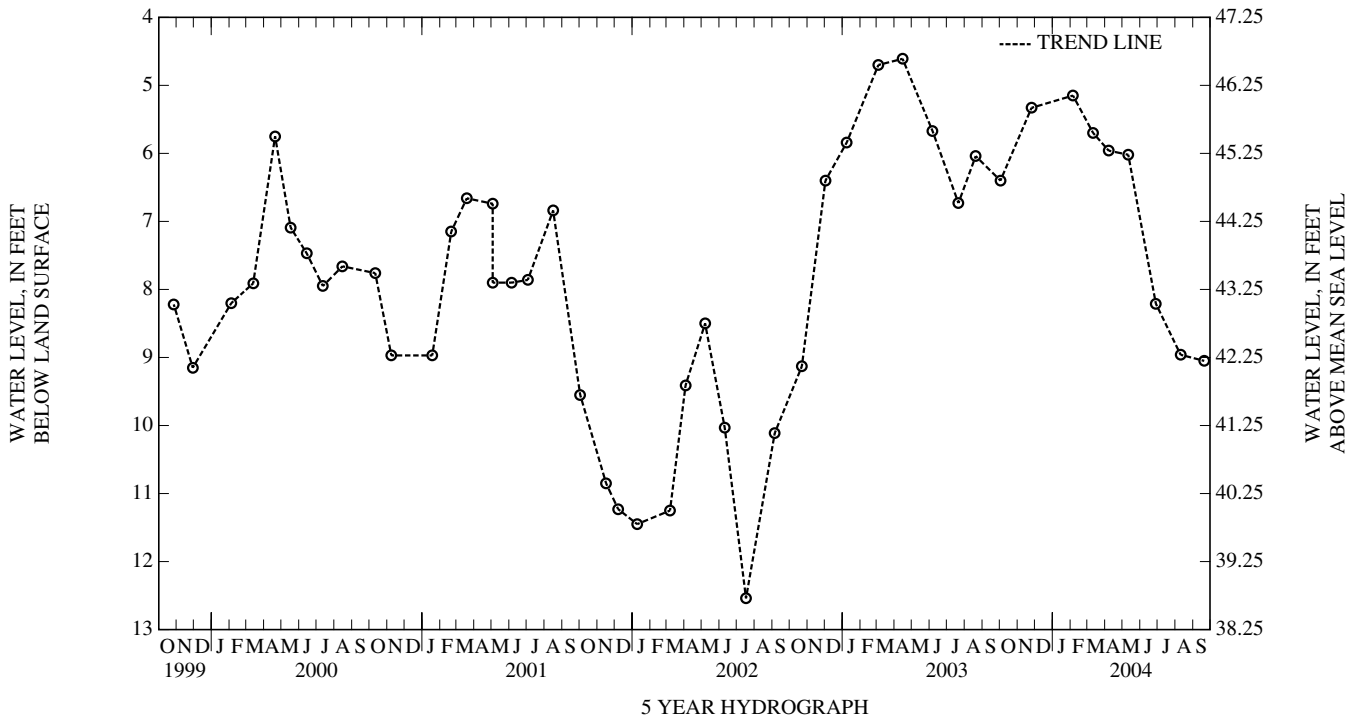
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.41 ft below land surface, February 25, 1998; lowest measured, 12.54 ft below land surface, July 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	6.40	MAR 11, 2004	5.70	JUN 28, 2004	8.21
NOV 25	5.33	APR 07	5.96	AUG 10	8.96
FEB 05, 2004	5.15	MAY 11	6.02	SEP 20	9.05
HIGHEST	5.15	FEB 05, 2004			
LOWEST	9.05	SEP 20, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of23-03. SITE ID.--384333075222901. PERMIT NUMBER.--95793.

LOCATION.--Lat 38°43'33", long 75°22'29", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 20 ft; casing diameter 2 in., to 17 ft; screen diameter 2 in., screened from 17 to 20 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 51.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.20 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.34 ft below land surface, April 1, 1994 (recorder); lowest measured, 12.69 ft below land surface, August 27, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

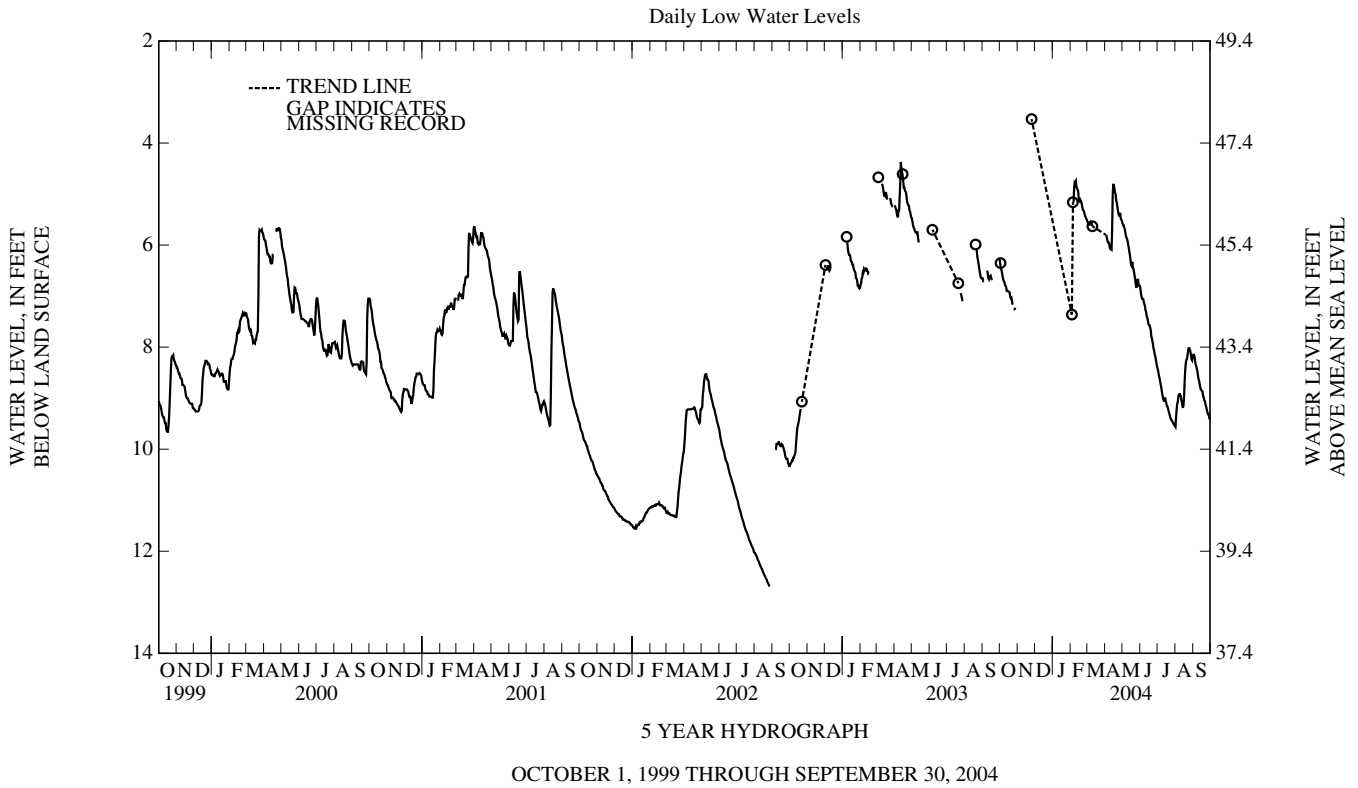
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	6.35	FEB 05, 2004	5.16	APR 07, 2004	5.94	SEP 20, 2004	9.04
NOV 25	3.53	MAR 10	5.63	MAY 11	5.97		
FEB 03, 2004	7.36	APR 02	5.80	JUN 28	8.22		

HIGHEST 3.53 NOV 25, 2003
LOWEST 9.04 SEP 20, 2004

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.30	6.28	---	---	---	---	---	---	---	---	5.53	5.50
2	6.41	6.30	---	---	---	---	---	---	---	---	5.56	5.52
3	6.45	6.41	---	---	---	---	---	---	---	---	5.60	5.56
4	6.50	6.43	---	---	---	---	---	---	---	---	5.60	5.59
5	6.56	6.50	---	---	---	---	---	---	---	---	5.60	5.55
6	6.63	6.56	---	---	---	---	---	---	5.16	4.88	5.56	5.46
7	6.68	6.63	---	---	---	---	---	---	4.88	4.61	5.54	5.49
8	6.71	6.68	---	---	---	---	---	---	4.76	4.64	5.55	5.48
9	6.73	6.71	---	---	---	---	---	---	4.76	4.71	5.61	5.55
10	6.78	6.73	---	---	---	---	---	---	4.74	4.72	5.63	5.61
11	6.80	6.78	---	---	---	---	---	---	4.87	4.72	---	---
12	6.83	6.80	---	---	---	---	---	---	4.88	4.87	---	---
13	6.90	6.83	---	---	---	---	---	---	4.92	4.88	---	---
14	6.90	6.81	---	---	---	---	---	---	4.94	4.92	---	---
15	6.90	6.81	---	---	---	---	---	---	5.08	4.94	---	---
16	6.91	6.90	---	---	---	---	---	---	5.14	5.08	---	---
17	6.92	6.91	---	---	---	---	---	---	5.15	5.12	---	---
18	6.93	6.92	---	---	---	---	---	---	5.12	5.09	---	---
19	7.02	6.93	---	---	---	---	---	---	5.15	5.09	---	---
20	7.04	7.02	---	---	---	---	---	---	5.17	5.11	---	---
21	7.03	6.98	---	---	---	---	---	---	5.25	5.11	---	---
22	7.09	7.02	---	---	---	---	---	---	5.30	5.25	---	---
23	7.17	7.09	---	---	---	---	---	---	5.32	5.30	---	---
24	---	---	---	---	---	---	---	---	5.34	5.30	---	---
25	7.26	7.25	---	---	---	---	---	---	5.38	5.34	---	---
26	7.26	7.25	---	---	---	---	---	---	5.43	5.38	---	---
27	7.25	7.20	---	---	---	---	---	---	5.45	5.43	---	---
28	7.23	7.16	---	---	---	---	---	---	5.49	5.45	---	---
29	---	---	---	---	---	---	---	---	5.50	5.49	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	7.26	6.28	---	---	---	---	---	---	5.50	4.61	5.63	5.46

SUSSEX COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	5.57	5.53	6.84	6.75	8.42	8.38	9.56	9.39	8.15	8.11
2	---	---	5.61	5.57	6.94	6.84	8.47	8.42	9.39	9.23	8.15	8.12
3	5.80	5.80	5.61	5.58	7.01	6.93	8.54	8.47	9.23	9.11	8.18	8.15
4	5.87	5.79	5.65	5.60	7.05	7.01	8.59	8.54	9.11	9.08	8.26	8.18
5	5.92	5.87	5.69	5.65	7.05	7.02	8.65	8.59	9.08	8.97	8.34	8.26
6	5.95	5.92	5.76	5.69	7.06	7.02	8.71	8.65	8.97	8.93	8.37	8.34
7	5.95	5.93	5.82	5.76	7.11	7.06	8.77	8.71	8.93	8.91	8.42	8.37
8	5.98	5.95	5.86	5.81	7.16	7.11	8.84	8.77	8.92	8.91	8.46	8.42
9	6.05	5.98	5.88	5.85	7.20	7.16	8.92	8.84	8.92	8.92	8.55	8.46
10	6.08	6.05	5.93	5.88	7.28	7.20	8.97	8.92	8.95	8.92	8.62	8.55
11	6.08	6.07	6.00	5.93	7.31	7.28	9.03	8.97	9.02	8.95	8.66	8.62
12	6.09	5.69	6.06	6.00	7.39	7.31	9.05	9.03	9.07	9.02	8.72	8.66
13	5.69	5.01	6.14	6.06	7.42	7.39	9.04	8.98	9.14	9.06	8.78	8.72
14	5.01	4.80	6.20	6.14	7.47	7.42	8.99	8.96	9.19	9.14	8.83	8.78
15	4.80	4.74	6.30	6.20	7.54	7.47	9.05	8.99	9.14	8.94	8.84	8.83
16	4.83	4.75	6.39	6.30	7.57	7.54	9.09	9.05	8.94	8.67	8.86	8.84
17	4.89	4.83	6.41	6.33	7.57	7.56	9.15	9.09	8.67	8.44	8.87	8.86
18	4.97	4.89	6.33	6.31	7.61	7.57	9.16	9.15	8.44	8.31	8.96	8.86
19	5.00	4.97	6.43	6.33	7.66	7.61	9.20	9.16	8.31	8.25	8.98	8.96
20	5.12	5.00	6.47	6.43	7.78	7.66	9.25	9.20	8.25	8.23	9.04	8.98
21	5.16	5.12	6.52	6.47	7.83	7.78	9.29	9.25	8.23	8.16	9.06	9.04
22	5.24	5.16	6.60	6.51	7.88	7.83	9.33	9.29	8.16	8.06	9.11	9.06
23	5.32	5.24	6.67	6.60	7.95	7.88	9.38	9.33	8.06	8.02	9.16	9.11
24	5.38	5.31	6.76	6.67	8.03	7.95	9.41	9.38	8.02	8.01	9.20	9.16
25	5.42	5.38	6.84	6.75	8.07	8.03	9.43	9.41	8.02	8.02	9.25	9.20
26	5.42	5.36	6.75	6.63	8.14	8.07	9.44	9.43	8.05	8.02	9.30	9.25
27	5.37	5.31	6.68	6.63	8.19	8.14	9.47	9.44	8.09	8.05	9.32	9.30
28	5.48	5.37	6.68	6.64	8.24	8.19	9.48	9.47	8.16	8.09	9.32	9.31
29	5.50	5.48	6.78	6.68	8.32	8.24	9.51	9.48	8.24	8.16	9.40	9.32
30	5.53	5.50	6.80	6.78	8.38	8.32	9.53	9.51	8.26	8.18	9.42	9.40
31	---	---	6.80	6.73	---	---	9.54	9.53	8.18	8.15	---	---
MONTH	6.09	4.74	6.84	5.53	8.38	6.75	9.54	8.38	9.56	8.01	9.42	8.11
YEAR	9.56	4.61										



SUSSEX COUNTY--Continued

WELL NUMBER.--Of23-04. SITE ID.--384341075223803. PERMIT NUMBER.--95776.

LOCATION.--Lat 38°43'41", long 75°22'38", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 104 ft; casing diameter 2 in., to 101 ft; screen diameter 2 in., screened from 101 to 104 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.29 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 1998, (due to excavation of material during construction of artificial wetland), the elevation of land surface was 52.19 ft above National Geodetic Vertical Datum of 1929. Measuring. point: Top of metal sleeve, 0.76 ft above land surface. Prior to July 2, 1998, (due to excavation of material during construction of artificial wetland),the MP was 2.24 ft above land surface.

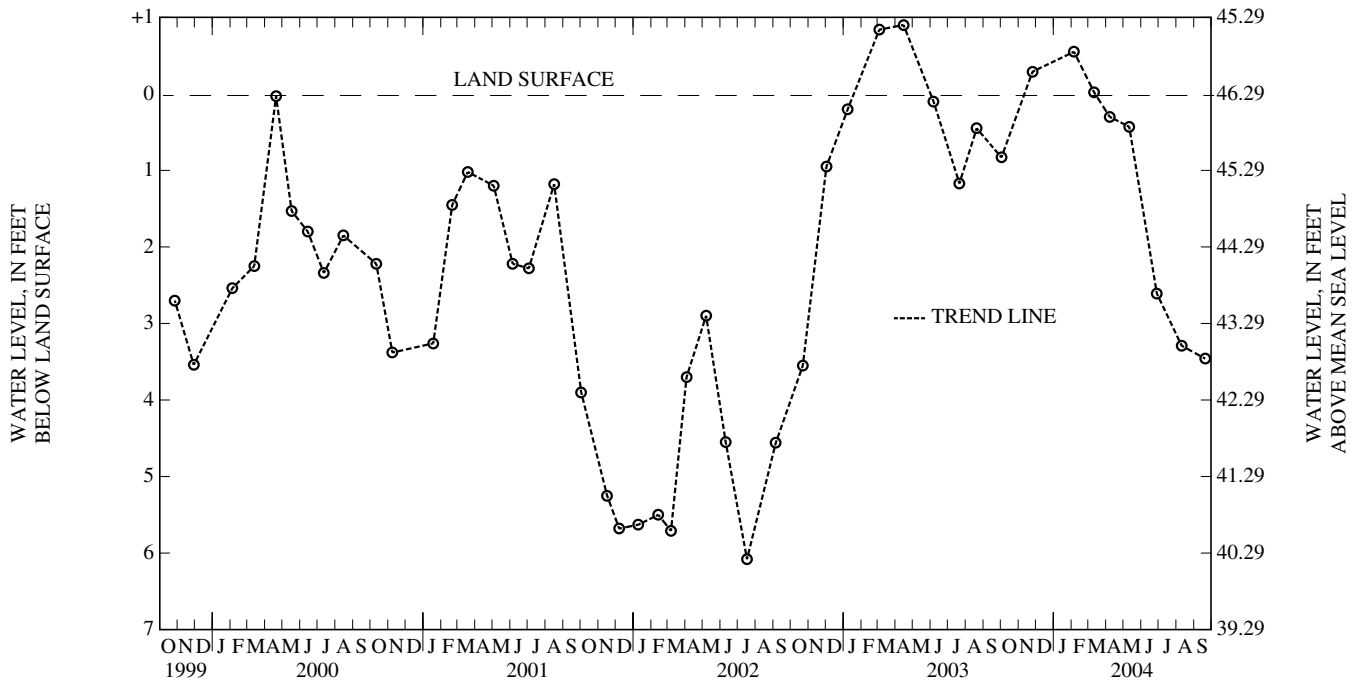
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.90 ft above land surface, April 15, 2003; lowest measured, 10.37 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.83	MAR 11, 2004	+.02	JUN 28, 2004	2.61
NOV 25	+.29	APR 07	.30	AUG 10	3.29
FEB 05, 2004	+.55	MAY 11	.43	SEP 20	3.46
HIGHEST	+.55	FEB 05, 2004			
LOWEST	3.46	SEP 20, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.-- Of23-05. SITE ID.--384341075223801. PERMIT NUMBER.--95794.

LOCATION.--Lat 38°43'41", long 75°22'38", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18 ft; casing diameter 2 in., to 15 ft; screen diameter 2 in., screened from 15 to 18 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1998 to current year.

DATUM.--Elevation of land surface is 46.49 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 1998 (due to excavation of material during construction of artificial wetland) the elevation of land surface was 50.13 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.30 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.60 ft above land surface, April 15, 2003; lowest measured, 9.95 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

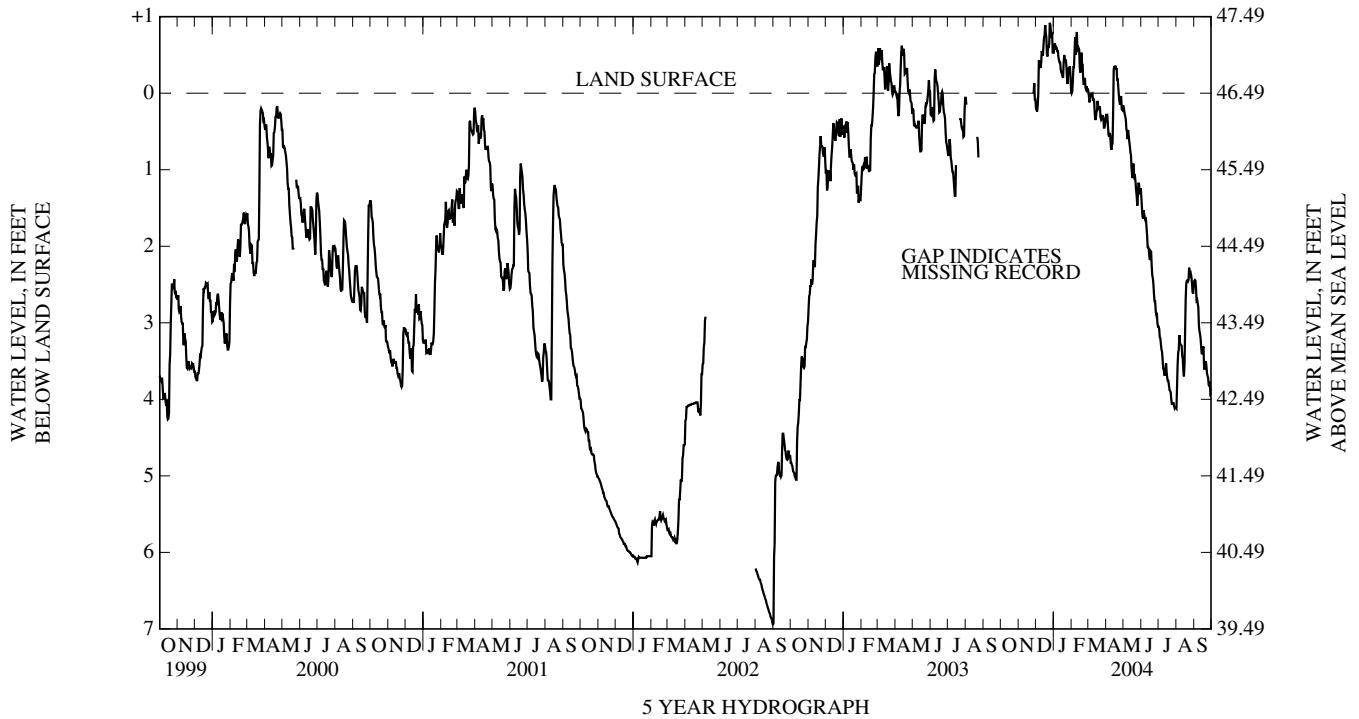
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.71	MAR 11, 2004	.03	JUN 28, 2004	2.88
NOV 25	.00	APR 07	.40	AUG 10	3.29
JAN 30, 2004	+43	MAY 11	.55	SEP 20	3.55
HIGHEST	+43	JAN 30, 2004			
LOWEST	3.55	SEP 20, 2004			

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	---	---	---	---	0.20	-0.11	-0.53	-0.72	0.00	-0.05	-0.02	-0.09
2	---	---	---	---	0.22	0.10	-0.62	-0.72	-0.02	-0.15	0.04	-0.14
3	---	---	---	---	0.24	0.16	-0.65	-0.71	-0.15	-0.46	0.12	0.00
4	---	---	---	---	0.16	0.01	-0.57	-0.66	-0.34	-0.38	0.04	-0.07
5	---	---	---	---	0.01	-0.43	-0.60	-0.67	-0.34	-0.55	0.04	-0.20
6	---	---	---	---	-0.43	-0.51	-0.59	-0.68	-0.55	-0.95	0.01	-0.25
7	---	---	---	---	-0.39	-0.51	-0.55	-0.66	-0.73	-0.99	0.02	-0.28
8	---	---	---	---	-0.35	-0.40	-0.55	-0.62	-0.50	-0.73	0.01	-0.28
9	---	---	---	---	-0.33	-0.40	-0.47	-0.62	-0.65	-0.86	0.10	0.01
10	---	---	---	---	-0.40	-0.75	-0.43	-0.47	-0.80	-0.87	0.07	0.00
11	---	---	---	---	-0.55	-0.92	-0.40	-0.60	-0.56	-0.80	0.10	-0.03
12	---	---	---	---	-0.51	-0.59	-0.40	-0.62	-0.57	-0.69	0.25	-0.03
13	---	---	---	---	-0.49	-0.62	-0.31	-0.55	-0.59	-0.68	0.35	0.25
14	---	---	---	---	-0.62	-1.16	-0.27	-0.68	-0.57	-0.63	0.33	0.07
15	---	---	---	---	-0.73	-1.07	-0.26	-0.73	-0.34	-0.59	0.25	0.07
16	---	---	---	---	-0.76	-0.93	-0.22	-0.32	-0.27	-0.39	0.23	-0.13
17	---	---	---	---	-0.89	-1.17	-0.20	-0.38	-0.32	-0.54	0.10	-0.01
18	---	---	---	---	-0.79	-0.89	-0.38	-0.73	-0.53	-0.58	0.17	0.02
19	---	---	---	---	-0.73	-0.82	-0.50	-0.59	-0.37	-0.54	0.22	-0.11
20	---	---	---	---	-0.51	-0.73	-0.44	-0.52	-0.37	-0.60	0.19	-0.31
21	---	---	---	---	-0.48	-0.66	-0.43	-0.54	-0.18	-0.60	0.17	-0.33
22	---	---	---	---	-0.62	-0.67	-0.43	-0.70	-0.11	-0.20	0.31	0.17
23	---	---	---	---	-0.59	-0.65	-0.33	-0.43	-0.16	-0.28	0.34	0.22
24	---	---	---	---	-0.65	-1.01	-0.18	-0.48	-0.20	-0.36	0.32	0.25
25	---	---	---	---	-0.92	-1.00	-0.12	-0.29	-0.07	-0.21	0.35	0.27
26	---	---	-0.02	-0.08	-0.89	-0.98	-0.27	-0.36	-0.05	-0.16	0.29	0.23
27	---	---	-0.01	-0.13	-0.80	-0.93	-0.33	-0.60	-0.09	-0.17	0.32	0.21
28	---	---	-0.13	-0.42	-0.72	-0.81	-0.34	-0.48	-0.02	-0.09	0.45	0.32
29	---	---	0.08	-0.23	-0.80	-0.88	-0.34	-0.44	-0.06	-0.12	0.45	0.41
30	---	---	0.08	-0.11	-0.53	-0.93	-0.21	-0.46	---	---	0.41	0.35
31	---	---	---	---	-0.53	-0.74	-0.03	-0.21	---	---	0.35	0.27
MONTH	---	---	0.08	-0.42	0.24	-1.17	-0.03	-0.73	0.00	-0.99	0.45	-0.33

SUSSEX COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER						
1	0.27	0.14	0.17	0.15	1.36	1.19	3.05	3.01	4.12	3.84	2.45	2.34
2	0.31	0.24	0.21	0.12	1.49	1.35	3.08	3.04	3.84	3.55	2.44	2.38
3	0.30	0.25	0.27	0.16	1.61	1.45	3.19	3.08	3.55	3.32	2.45	2.42
4	0.43	0.18	0.30	0.24	1.64	1.53	3.20	3.19	3.39	3.31	2.56	2.44
5	0.54	0.42	0.34	0.22	1.53	1.46	3.28	3.18	3.35	3.16	2.71	2.56
6	0.57	0.43	0.47	0.34	1.58	1.48	3.35	3.28	3.16	3.11	2.70	2.65
7	0.52	0.37	0.50	0.39	1.63	1.57	3.38	3.34	3.26	3.14	2.75	2.66
8	0.55	0.46	0.60	0.44	1.66	1.61	3.49	3.38	3.28	3.25	2.80	2.75
9	0.69	0.50	0.48	0.39	1.65	1.57	3.60	3.49	3.29	3.25	3.04	2.79
10	0.74	0.62	0.55	0.48	1.75	1.63	3.61	3.59	3.30	3.26	3.11	3.04
11	0.67	0.62	0.63	0.55	1.86	1.75	3.68	3.61	3.43	3.30	3.15	3.10
12	0.66	0.25	0.69	0.61	2.01	1.84	3.68	3.59	3.47	3.41	3.21	3.14
13	0.25	-0.42	0.77	0.69	2.01	1.96	3.59	3.53	3.63	3.44	3.32	3.21
14	-0.31	-0.47	0.81	0.76	2.04	1.95	3.53	3.40	3.70	3.54	3.41	3.32
15	-0.35	-0.41	0.98	0.81	2.14	2.04	3.65	3.50	3.54	3.12	3.39	3.30
16	-0.32	-0.44	1.07	0.96	2.18	2.06	3.72	3.64	3.12	2.70	3.33	3.28
17	-0.36	-0.47	1.11	0.92	2.06	1.96	3.76	3.71	2.70	2.49	3.31	3.20
18	-0.31	-0.37	0.92	0.75	2.07	1.99	3.76	3.69	2.49	2.39	3.60	3.16
19	-0.33	-0.45	1.03	0.82	2.25	2.07	3.82	3.73	2.45	2.40	3.60	3.48
20	-0.18	-0.39	1.10	1.03	2.38	2.25	3.88	3.82	2.45	2.40	3.55	3.45
21	-0.18	-0.23	1.09	1.01	2.42	2.36	3.89	3.87	2.46	2.38	3.50	3.45
22	-0.07	-0.18	1.17	1.04	2.50	2.39	3.91	3.88	2.44	2.27	3.56	3.50
23	0.03	-0.09	1.27	1.15	2.63	2.50	4.00	3.91	2.28	2.21	3.66	3.56
24	0.11	0.01	1.35	1.25	2.72	2.62	4.06	4.00	2.36	2.27	3.69	3.66
25	0.15	0.02	1.47	1.34	2.72	2.63	4.06	4.05	2.38	2.34	3.72	3.66
26	0.05	-0.03	1.34	1.06	2.85	2.60	4.05	4.03	2.36	2.32	3.81	3.72
27	0.05	-0.16	1.17	1.07	2.89	2.83	4.05	4.01	2.40	2.34	3.83	3.77
28	0.21	0.05	1.19	1.06	2.87	2.81	4.09	4.05	2.49	2.37	3.77	3.59
29	0.22	0.13	1.31	1.19	3.01	2.87	4.12	4.09	2.60	2.48	3.95	3.65
30	0.17	0.10	1.31	1.24	3.05	3.01	4.11	4.09	2.62	2.39	3.95	3.89
31	---	---	1.24	1.11	---	---	4.11	4.08	2.51	2.35	---	---
MONTH	0.74	-0.47	1.47	0.12	3.05	1.19	4.12	3.01	4.12	2.21	3.95	2.34
YEAR	4.12	-1.17										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of23-06. SITE ID.--384341075223802. PERMIT NUMBER.--95783.

LOCATION.--Lat 38°43'41", long 75°22'38", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 55 ft; casing diameter 2 in., to 52 ft; screen diameter 2 in., screened from 52 to 55 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.38 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 1998 (due to excavation of material during construction of artificial wetland) the elevation of land surface was 50.14 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 1.42 ft above land surface. Prior to July 2, 1998 (due to excavation of material during construction of artificial wetland) the MP was 2.34 ft above land surface.

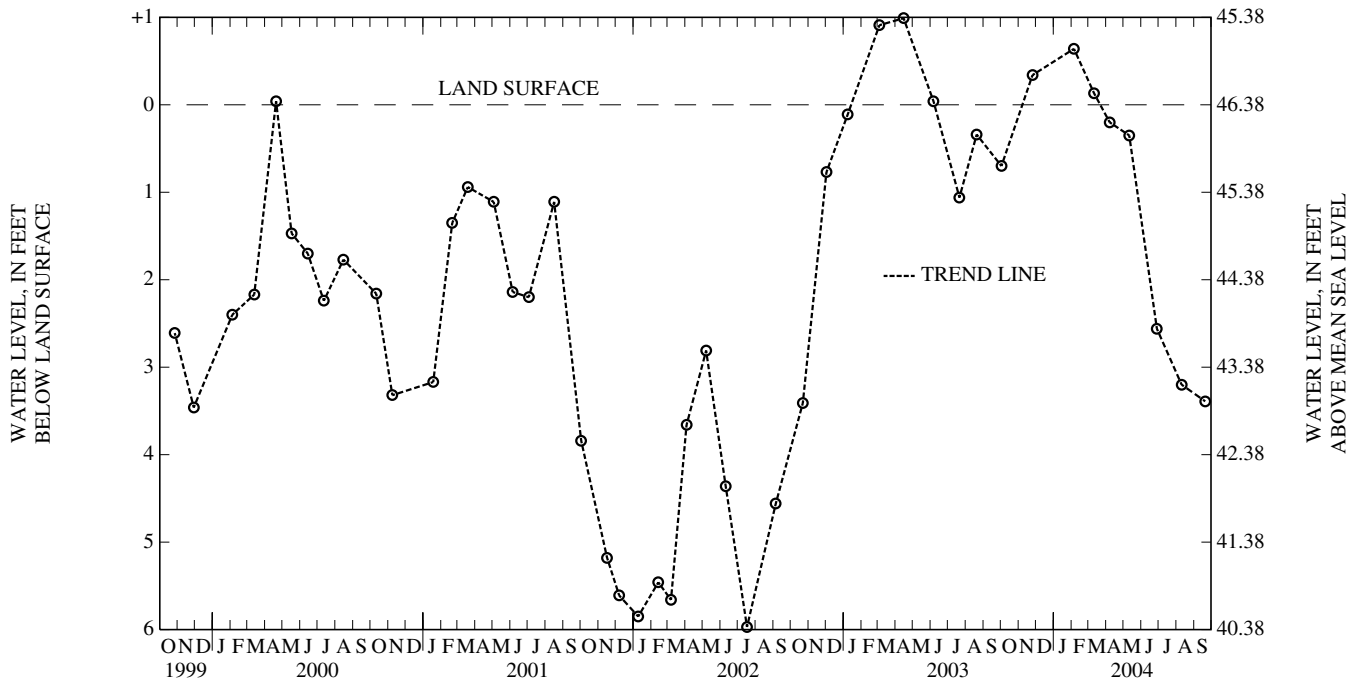
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.99 ft above land surface, April 15, 2003; lowest measured, 10.48 ft below land surface, October 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.70	MAR 11, 2004	+1.13	JUN 28, 2004	2.56
NOV 25	+3.34	APR 07	.20	AUG 10	3.20
FEB 05, 2004	+6.64	MAY 11	.35	SEP 20	3.39
HIGHEST	+6.64	FEB 05, 2004			
LOWEST	3.39	SEP 20, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of23-11. SITE ID.--384345075225101. PERMIT NUMBER.--159964.

LOCATION.--Lat 38°43'45", long 75°22'50", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 2 in., to 16 ft; screen diameter 2 in., screened from 16 to 19 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1998 to current year.

DATUM.--Altitude of land surface is 46.64 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.60 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--August 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.17 ft above land surface April 12, 2003 (recorder); lowest measured, 7.37 ft, below land surface, August 31, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

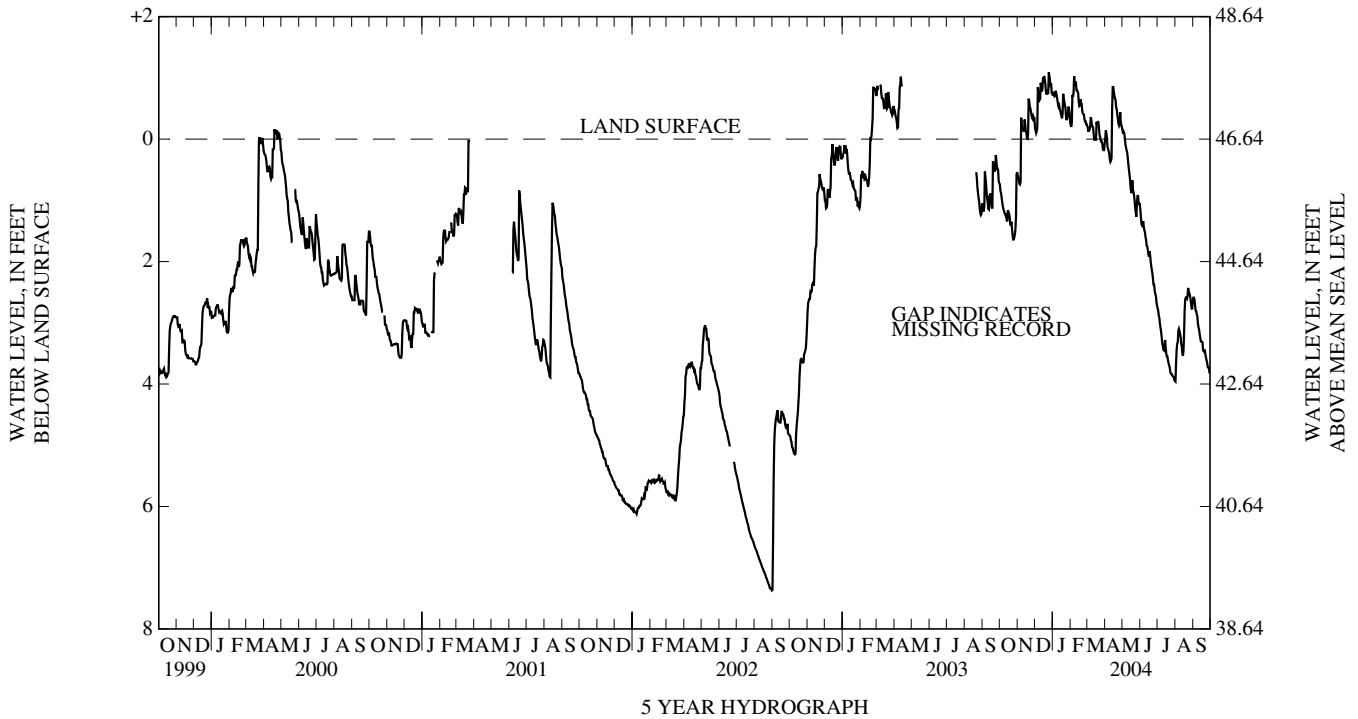
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.75	MAR 11, 2004	+20	JUN 28, 2004	2.55
NOV 25	+39	APR 07	.11	AUG 10	3.19
FEB 05, 2004	+70	MAY 11	.32	SEP 20	3.47
HIGHEST	+70	FEB 05, 2004			
LOWEST	3.47	SEP 20, 2004			

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	0.74	0.70	0.59	0.54	-0.19	-0.38	-0.71	-0.82	-0.23	-0.28	-0.21	-0.24
2	0.85	0.74	0.63	0.59	-0.14	-0.22	-0.75	-0.80	-0.20	-0.27	-0.17	-0.28
3	0.88	0.84	0.67	0.63	-0.10	-0.14	-0.74	-0.78	-0.27	-0.82	-0.12	-0.17
4	0.95	0.84	0.73	0.67	-0.13	-0.18	-0.70	-0.75	-0.72	-0.82	-0.16	-0.20
5	1.03	0.95	0.74	0.70	-0.18	-0.88	-0.71	-0.92	-0.69	-0.76	-0.16	-0.26
6	1.09	1.03	0.70	-0.36	-0.85	-0.94	-0.79	-0.92	-0.76	-1.20	-0.23	-0.51
7	1.14	1.09	-0.35	-0.38	-0.74	-0.85	-0.74	-0.80	-1.03	-1.23	-0.36	-0.45
8	1.17	1.14	-0.19	-0.35	-0.68	-0.74	-0.70	-0.74	-0.88	-1.03	-0.30	-0.46
9	1.20	1.17	-0.16	-0.19	-0.64	-0.68	-0.63	-0.73	-0.91	-1.00	-0.21	-0.30
10	1.23	1.19	-0.15	-0.18	-0.66	-0.92	-0.57	-0.63	-0.94	-0.98	-0.21	-0.23
11	1.25	1.18	-0.14	-0.18	-0.92	-1.20	-0.53	-0.63	-0.80	-0.94	-0.19	-0.24
12	1.24	1.16	-0.12	-0.39	-0.85	-0.96	-0.55	-0.65	-0.80	-0.84	-0.07	-0.23
13	1.33	1.24	-0.32	-0.53	-0.78	-0.85	-0.49	-0.62	-0.78	-0.83	0.01	-0.07
14	1.33	1.11	-0.24	-0.32	-0.83	-1.31	-0.46	-0.65	-0.75	-0.79	0.01	-0.09
15	1.16	1.00	-0.13	-0.24	-1.01	-1.25	-0.41	-0.69	-0.61	-0.75	0.01	-0.09
16	1.19	1.15	-0.10	-0.13	-0.99	-1.03	-0.37	-0.43	-0.54	-0.63	0.01	-0.42
17	1.22	1.19	-0.02	-0.10	-1.03	-1.19	-0.34	-0.42	-0.55	-0.65	-0.28	-0.41
18	1.26	1.22	-0.01	-0.08	-0.97	-1.07	-0.42	-0.90	-0.65	-0.71	-0.23	-0.28
19	1.38	1.26	-0.08	-0.66	-0.90	-0.97	-0.74	-0.88	-0.59	-0.69	-0.28	-0.40
20	1.41	1.34	-0.66	-0.74	-0.77	-0.90	-0.64	-0.74	-0.58	-0.69	-0.28	-0.48
21	1.35	1.25	-0.62	-0.69	-0.73	-0.81	-0.61	-0.64	-0.47	-0.69	-0.20	-0.48
22	1.46	1.35	-0.53	-0.62	-0.77	-0.81	-0.56	-0.70	-0.42	-0.47	-0.08	-0.20
23	1.56	1.46	-0.50	-0.53	-0.75	-0.77	-0.50	-0.56	-0.41	-0.46	-0.04	-0.09
24	1.64	1.56	-0.45	-0.56	-0.75	-1.29	-0.36	-0.53	-0.40	-0.48	0.01	-0.04
25	1.64	1.61	-0.39	-0.45	-1.09	-1.20	-0.31	-0.36	-0.32	-0.40	0.04	0.00
26	1.61	1.55	-0.35	-0.41	-1.04	-1.09	-0.35	-0.38	-0.29	-0.33	0.04	0.01
27	1.56	1.45	-0.33	-0.37	-0.95	-1.04	-0.37	-0.64	-0.29	-0.33	0.08	0.01
28	1.48	1.27	-0.37	-0.54	-0.89	-0.95	-0.53	-0.64	-0.24	-0.29	0.17	0.08
29	1.27	0.55	-0.34	-0.55	-0.91	-0.96	-0.51	-0.54	-0.24	-0.26	0.18	0.16
30	0.57	0.53	-0.34	-0.38	-0.76	-0.98	-0.43	-0.53	---	---	0.18	0.07
31	0.54	0.52	---	---	-0.76	-0.84	-0.28	-0.43	---	---	0.07	-0.02
MONTH	1.64	0.52	0.74	-0.74	-0.10	-1.31	-0.28	-0.92	-0.20	-1.23	0.18	-0.51

SUSSEX COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	0.00	-0.24	-0.14	-0.19	1.15	0.99	2.76	2.72	3.96	3.68	2.59	2.54
2	-0.14	-0.23	-0.09	-0.17	1.27	1.15	2.80	2.76	3.68	3.45	2.59	2.54
3	-0.10	-0.14	-0.12	-0.24	1.39	1.27	2.88	2.80	3.45	3.32	2.62	2.59
4	0.00	-0.15	-0.10	-0.22	1.41	1.39	2.92	2.88	3.34	3.31	2.71	2.62
5	0.13	0.00	-0.02	-0.10	1.39	1.30	3.01	2.92	3.32	3.13	2.80	2.71
6	0.16	0.11	0.08	-0.02	1.34	1.30	3.08	3.01	3.13	3.06	2.81	2.80
7	0.20	0.11	0.13	0.06	1.43	1.34	3.14	3.08	3.10	3.06	2.86	2.81
8	0.24	0.20	0.18	0.10	1.49	1.43	3.23	3.14	3.14	3.10	2.89	2.86
9	0.33	0.22	0.21	0.14	1.52	1.49	3.33	3.23	3.18	3.14	3.01	2.89
10	0.37	0.33	0.29	0.21	1.60	1.52	3.38	3.33	3.23	3.18	3.07	3.01
11	0.35	0.28	0.40	0.29	1.65	1.60	3.44	3.38	3.34	3.23	3.11	3.07
12	0.31	-0.48	0.48	0.40	1.74	1.64	3.45	3.38	3.39	3.34	3.18	3.11
13	-0.48	-0.94	0.57	0.48	1.75	1.74	3.38	3.27	3.50	3.39	3.24	3.18
14	-0.85	-0.95	0.65	0.57	1.81	1.75	3.28	3.22	3.54	3.45	3.30	3.24
15	-0.85	-0.92	0.78	0.65	1.88	1.81	3.40	3.28	3.45	3.16	3.31	3.29
16	-0.77	-0.85	0.86	0.77	1.92	1.82	3.50	3.40	3.16	2.79	3.31	3.29
17	-0.71	-0.78	0.88	0.61	1.83	1.79	3.55	3.50	2.79	2.61	3.32	3.28
18	-0.66	-0.71	0.67	0.58	1.90	1.83	3.55	3.53	2.61	2.56	3.45	3.26
19	-0.64	-0.69	0.82	0.67	2.00	1.90	3.61	3.54	2.59	2.56	3.45	3.43
20	-0.51	-0.64	0.86	0.82	2.08	2.00	3.66	3.61	2.60	2.59	3.47	3.45
21	-0.49	-0.52	0.91	0.84	2.14	2.08	3.69	3.66	2.61	2.56	3.46	3.45
22	-0.40	-0.49	1.00	0.90	2.20	2.14	3.73	3.69	2.56	2.43	3.51	3.46
23	-0.33	-0.41	1.11	1.00	2.29	2.20	3.80	3.73	2.43	2.40	3.57	3.51
24	-0.25	-0.34	1.19	1.11	2.38	2.29	3.83	3.80	2.49	2.42	3.61	3.57
25	-0.22	-0.26	1.27	1.08	2.38	2.37	3.84	3.83	2.51	2.49	3.65	3.61
26	-0.25	-0.48	1.08	0.83	2.48	2.38	3.84	3.83	2.55	2.51	3.72	3.65
27	-0.44	-0.57	0.93	0.83	2.53	2.48	3.87	3.83	2.60	2.55	3.73	3.72
28	-0.28	-0.44	0.93	0.76	2.56	2.53	3.88	3.87	2.68	2.60	3.73	3.64
29	-0.23	-0.28	1.03	0.86	2.66	2.56	3.89	3.87	2.76	2.68	3.81	3.67
30	-0.19	-0.23	1.06	1.03	2.72	2.66	3.93	3.89	2.78	2.65	3.81	3.80
31	---	---	1.06	0.95	---	---	3.95	3.93	2.65	2.59	---	---
MONTH	0.37	-0.95	1.27	-0.24	2.72	0.99	3.95	2.72	3.96	2.40	3.81	2.54
YEAR	3.96	-1.31										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Of23-12. SITE ID.--384345075225102. PERMIT NUMBER.--159965.

LOCATION.--Lat 38°43'45", long 75°22'51", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 60 ft; casing diameter 2 in., to 57 ft; screen diameter 2 in, screened. from 57 to 60 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 3.75 ft above land surface.

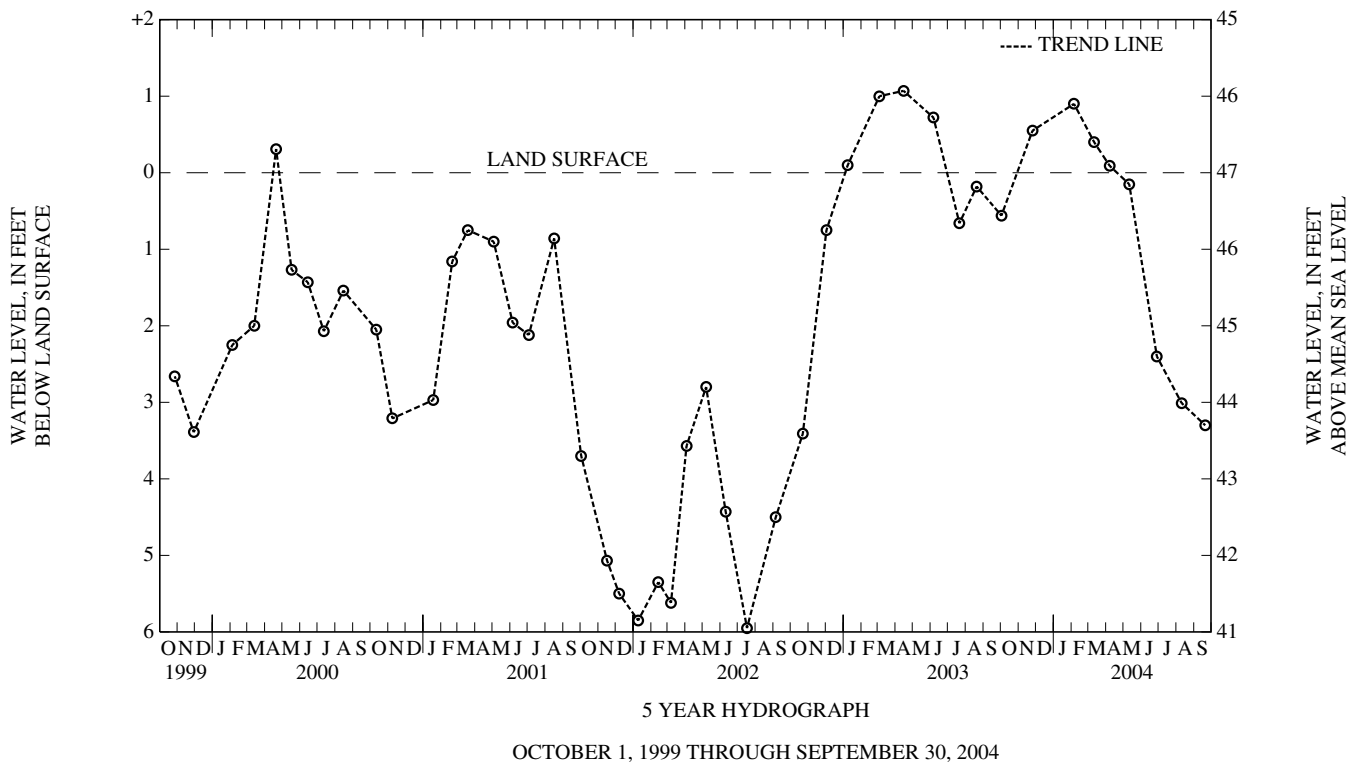
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--August 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft above land surface, April 15, 2003; lowest measured, 6.59 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.56	MAR 11, 2004	+40	JUN 28, 2004	2.40
NOV 25	+55	APR 07	+09	AUG 10	3.01
FEB 05, 2004	+90	MAY 11	.15	SEP 20	3.30
HIGHEST	+90	FEB 05, 2004			
LOWEST	3.30	SEP 20, 2004			



SUSSEX COUNTY--Continued

WELL NUMBER.--Of23-13. SITE ID.--384345075225103. PERMIT NUMBER.--159966.

LOCATION.--Lat 38°43'45", long 75°22'51", Hydrologic Unit 02060007, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 110 ft; casing diameter 2 in., to 106 ft; screen diameter 2 in., screened from 107 to 110 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 3.72 ft above land surface.

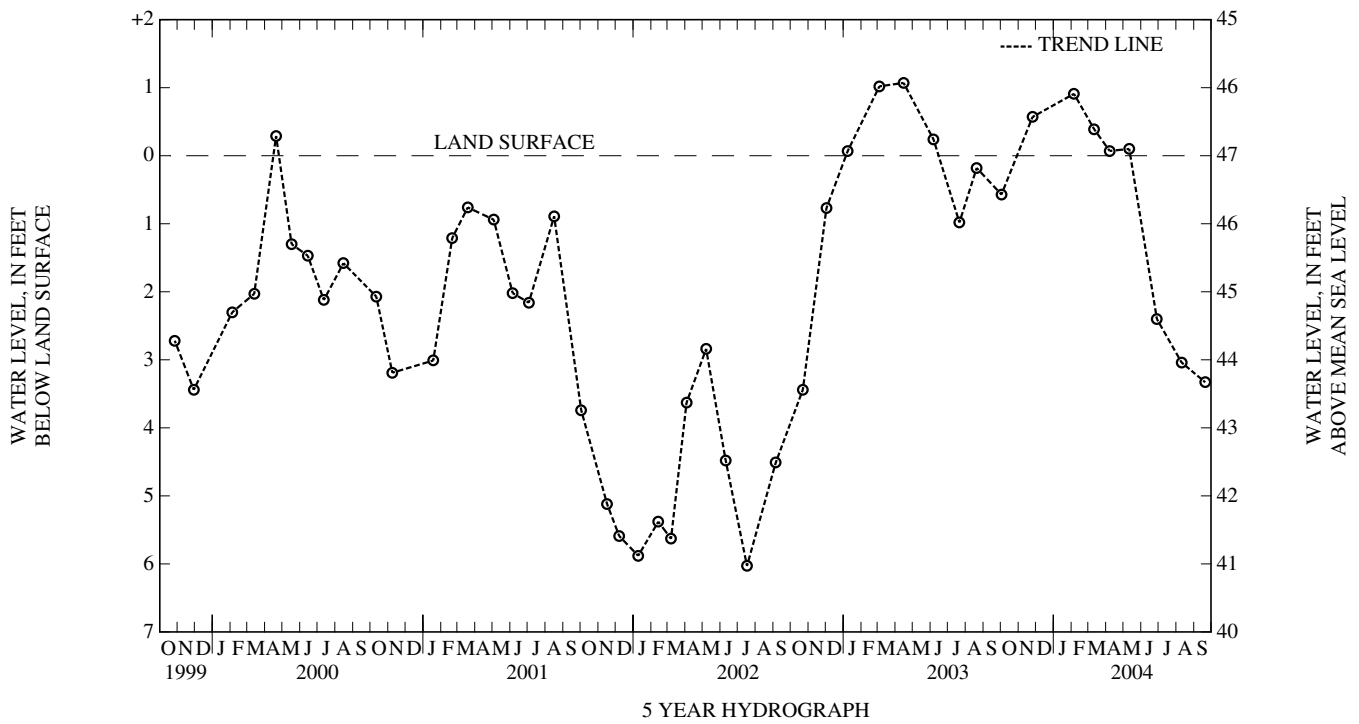
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--August 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft above land surface, April 15, 2003; lowest measured, 6.63 ft below land surface, December 4, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	.57	MAR 11, 2004	+.39	JUN 28, 2004	2.40
NOV 25	+.57	APR 07	+.07	AUG 10	3.04
FEB 05, 2004	+.91	MAY 11	+.10	SEP 20	3.33
HIGHEST	+.91	FEB 05, 2004			
LOWEST	3.33	SEP 20, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Oh54-01. SITE ID.--384038075110001.

LOCATION.--Lat 38°40'38", long 75°11'00", Hydrologic Unit 02060010, at intersection of DE Rts. 24 and 277, near Angola. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 290 ft; casing diameter 2 in., to 280 ft; screen diameter 2 in., screened from 280 to 290 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level measurements from November 1977 to December 1979. Twice yearly water level measurements from March 1980 to October 1984. Monthly water level measurements by U.S. Geological Survey and Delaware Geological Survey personnel from February 1985 to July 1987.

DATUM.--Elevation of land surface is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of steel casing, 1.5 ft above land surface.

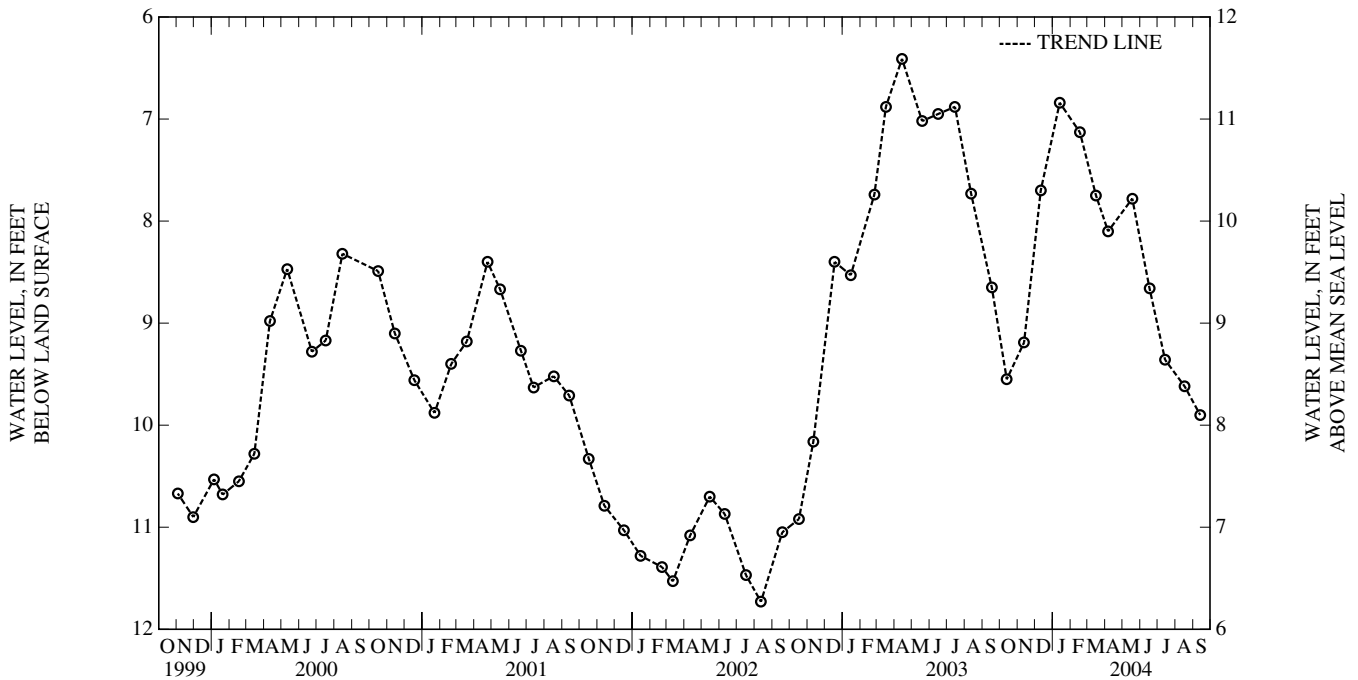
REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--November 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.35 ft below land surface, April 4, 1984; lowest measured, 12.44 ft below land surface, December 1, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	9.55	JAN 13, 2004	6.84	APR 06, 2004	8.10	JUL 14, 2004	9.36
NOV 12	9.19	FEB 17	7.13	MAY 18	7.78	AUG 17	9.62
DEC 11	7.70	MAR 16	7.75	JUN 17	8.66	SEP 13	9.90
HIGHEST 6.84 JAN 13, 2004							
LOWEST 9.90 SEP 13, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Oh54-02. SITE ID.--384038075110002.

LOCATION.--Lat 38°40'38", long 75°11'00", Hydrologic Unit 02060010, at intersection of DE Rts. 24 and 277, near Angola. Owner: U.S. Geological Survey.

AQUIFER.--Pocomoke aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 189 ft; casing diameter 2 in., to 179 ft; screen diameter 2 in., screened from 179 to 189 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level from November 1977 to December 1979. Twice yearly water level measurements from March 1980 to October 1984. Monthly water level measurements by U.S. Geological Survey and Delaware Geological Survey personnel from February 1985 to July 1987.

DATUM.--Elevation of land surface is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of steel casing, 1.5 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

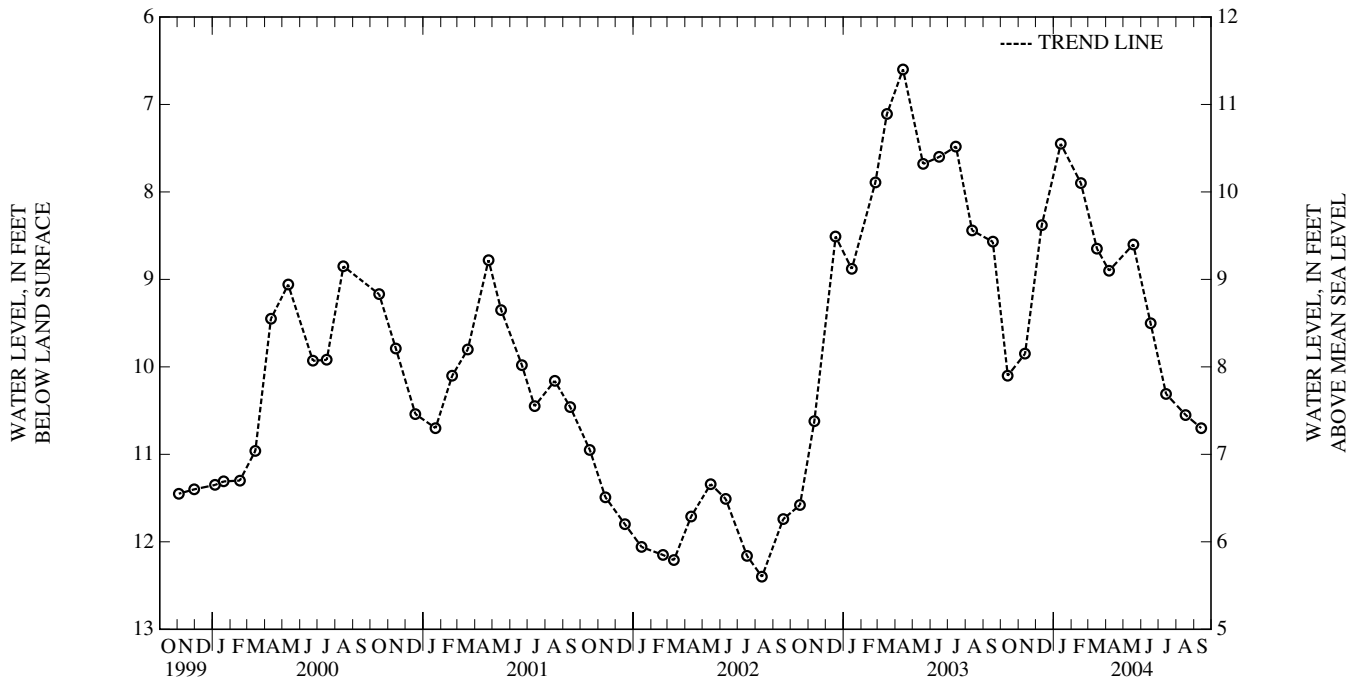
PERIOD OF RECORD.--November 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.44 ft below land surface, April 2, 1979; lowest measured, 13.85 ft below land surface, September 23, 1981.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	10.10	JAN 13, 2004	7.45	APR 06, 2004	8.90	JUL 14, 2004	10.31
NOV 12	9.85	FEB 17	7.90	MAY 18	8.60	AUG 17	10.55
DEC 11	8.38	MAR 16	8.65	JUN 17	9.50	SEP 13	10.70

HIGHEST 7.45 JAN 13, 2004
 LOWEST 10.70 SEP 13, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--O124-06. SITE ID.--384258075063101. PERMIT NUMBER.--03489.

LOCATION.--Lat 38°42'58", long 75°06'31", Hydrologic Unit 02060010, near DE Rt. 1, at Rehobeth Water Pumping Station. Owner: City of Rehobeth.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 250 ft; casing diameter 4 in., to 230 ft; screened from 230 to 250 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Equipped with graphic water-level recorder from June 1976 to December 1979. Monthly water level measurements from January 1980 to December 1981.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.70 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

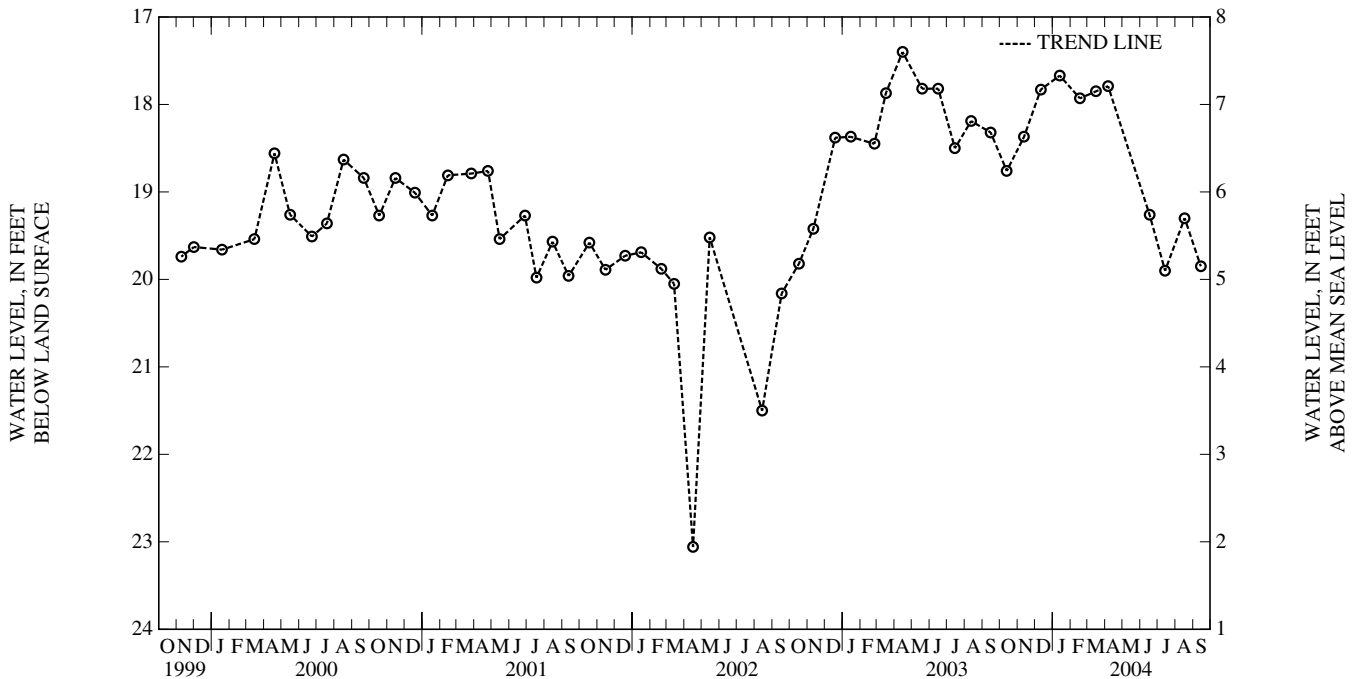
PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.90 ft below land surface, March 25, 1979. lowest measured, 23.06 ft below land surface, April 16, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	18.76	JAN 13, 2004	17.67	APR 06, 2004	17.79	AUG 17, 2004	19.30
NOV 12	18.37	FEB 17	17.93	JUN 17	19.26	SEP 14	19.85
DEC 11	17.83	MAR 16	17.85	JUL 14	19.90		

HIGHEST 17.67 JAN 13, 2004
 LOWEST 19.90 JUL 14, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Pf24-02. SITE ID.--383730075213501.

LOCATION.--Lat 38°37'30", long 75°21'35", Hydrologic Unit 02060010, near DE Rt. 113, near Stockley Hospital. Owner: U.S. Geological Survey.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 49 ft; casing diameter 4 in., to 46 ft; screen diameter 4 in., screened from 46 to 49 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape or electric tape by U.S. Geological Survey personnel from June 1998 to current year. Equipped with graphic water-level recorder from January 1970 to January 1982. Intermittent water level measurements from April 1982 to August 1987. Twice yearly water level measurements from February 1988 to April 1993.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Collection of Basic Records (CBR) observation well.

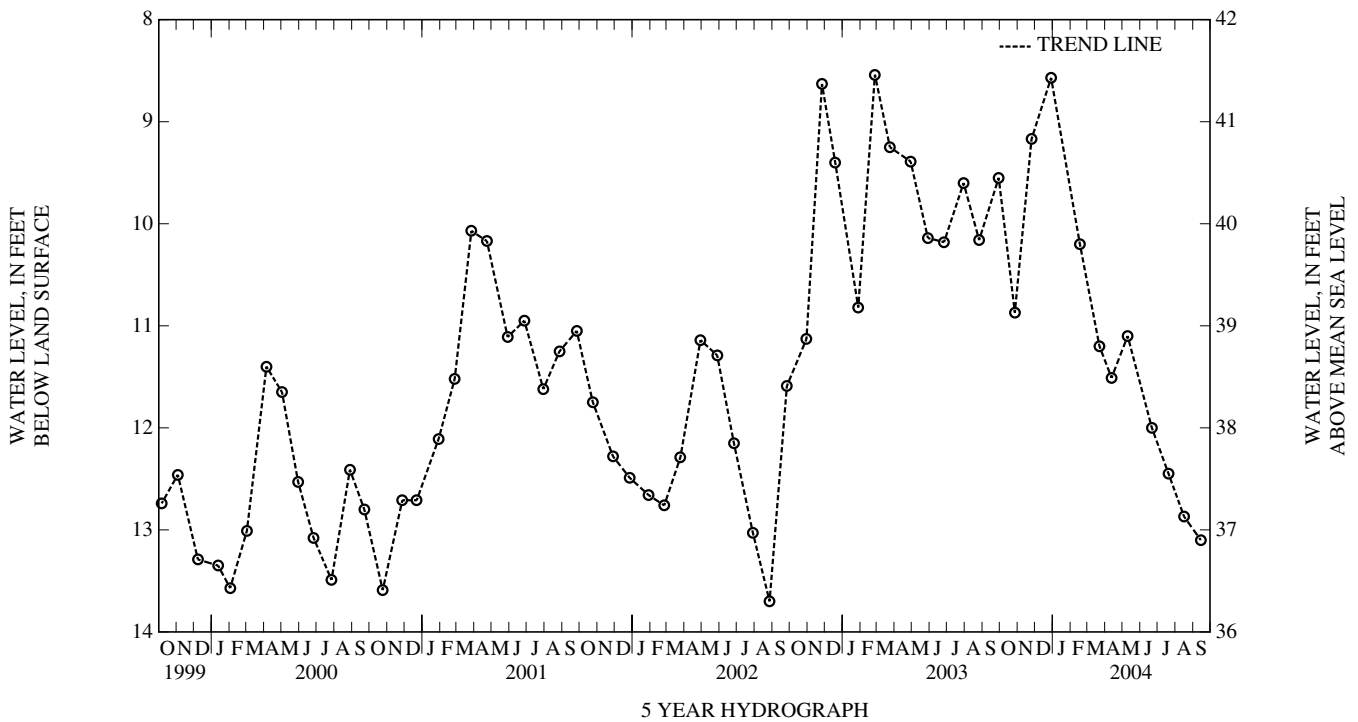
PERIOD OF RECORD.--January 1970 to April 1993, June 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.53 ft below land surface, March 10, 1979. lowest measured, 14.68 ft below land surface, September 2, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	10.87	FEB 17, 2004	10.20	MAY 10, 2004	11.10	AUG 16, 2004	12.87
NOV 25	9.17	MAR 22	11.20	JUN 21	12.00	SEP 14	13.10
DEC 29	8.57	APR 12	11.51	JUL 20	12.45		

HIGHEST 8.57 DEC 29, 2003
 LOWEST 13.10 SEP 14, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Pf24-03. SITE ID.--383730075213502.

LOCATION.--Lat 38°37'30", long 75°21'35", Hydrologic Unit 02060010, near DE Rt. 113, near Stockley Hospital. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 178 ft; casing diameter 4 in., to 58 ft; casing diameter 2 in., to 168 ft; screen diameter 2 in., screened from 168 to 178 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape or electric tape by U.S. Geological Survey personnel from June 1998 to current year. Weekly water level measurements from November 1976 to May 1977. Monthly water level measurements from June 1977 to December 1986. Intermittent water level measurements from February 1987 to November 1988. Twice yearly water level measurements from April 1989 to April 1993.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.70 ft above land surface.

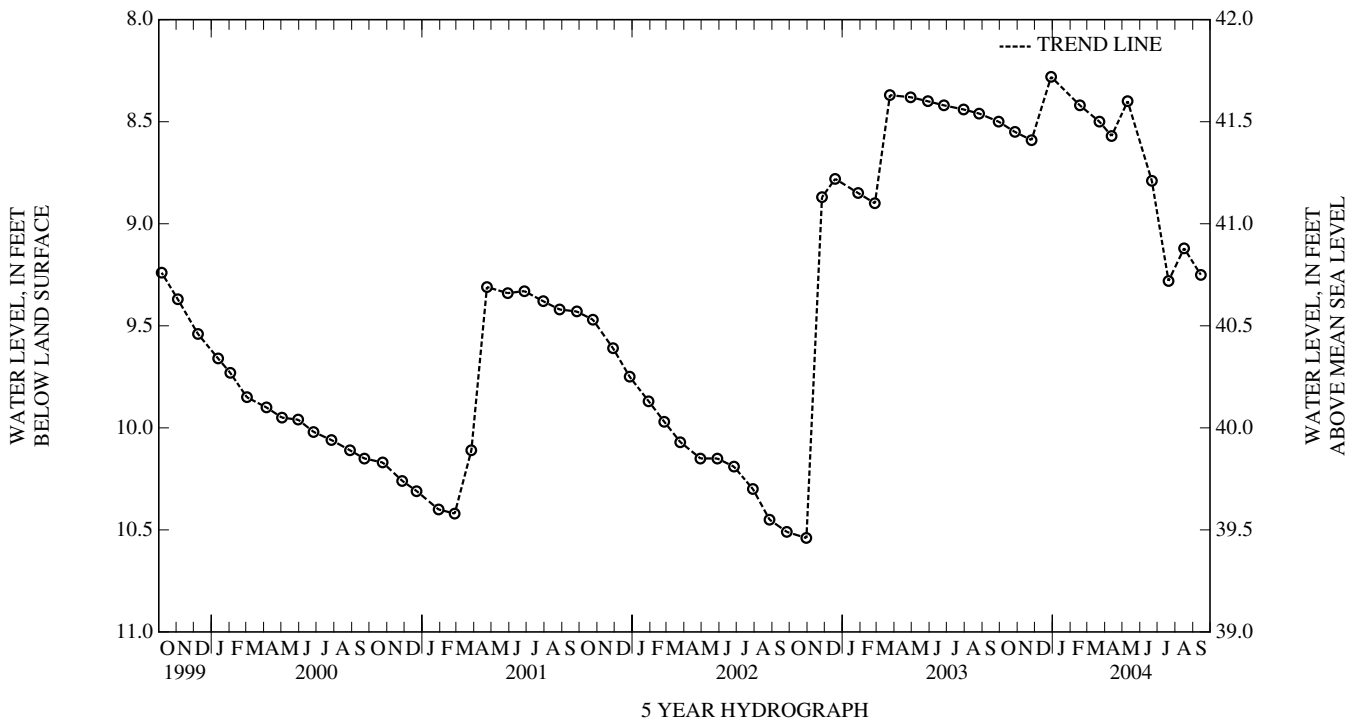
REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--November 1976 to April 1993, June 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.67 ft below land surface, April 2, 1979; lowest measured, 12.72 ft below land surface, August 28, 1979.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	8.55	FEB 17, 2004	8.42	MAY 10, 2004	8.40	AUG 16, 2004	9.12
NOV 25	8.59	MAR 22	8.50	JUN 21	8.79	SEP 14	9.25
DEC 29	8.28	APR 12	8.57	JUL 20	9.28		
HIGHEST	8.28	DEC 29, 2003					
LOWEST	9.28	JUL 20, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Qe44-01. SITE ID.--383138075260201. PERMIT NUMBER.--49320.

LOCATION.--Lat 38°31'38", long 75°26'02", Hydrologic Unit 02060008, 1.0 mi east of Whaleys Crossroads. Owner: Delaware Department of Transportation. AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 25 ft; casing diameter 1 in., to 22 ft; screened from 22 to 25 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

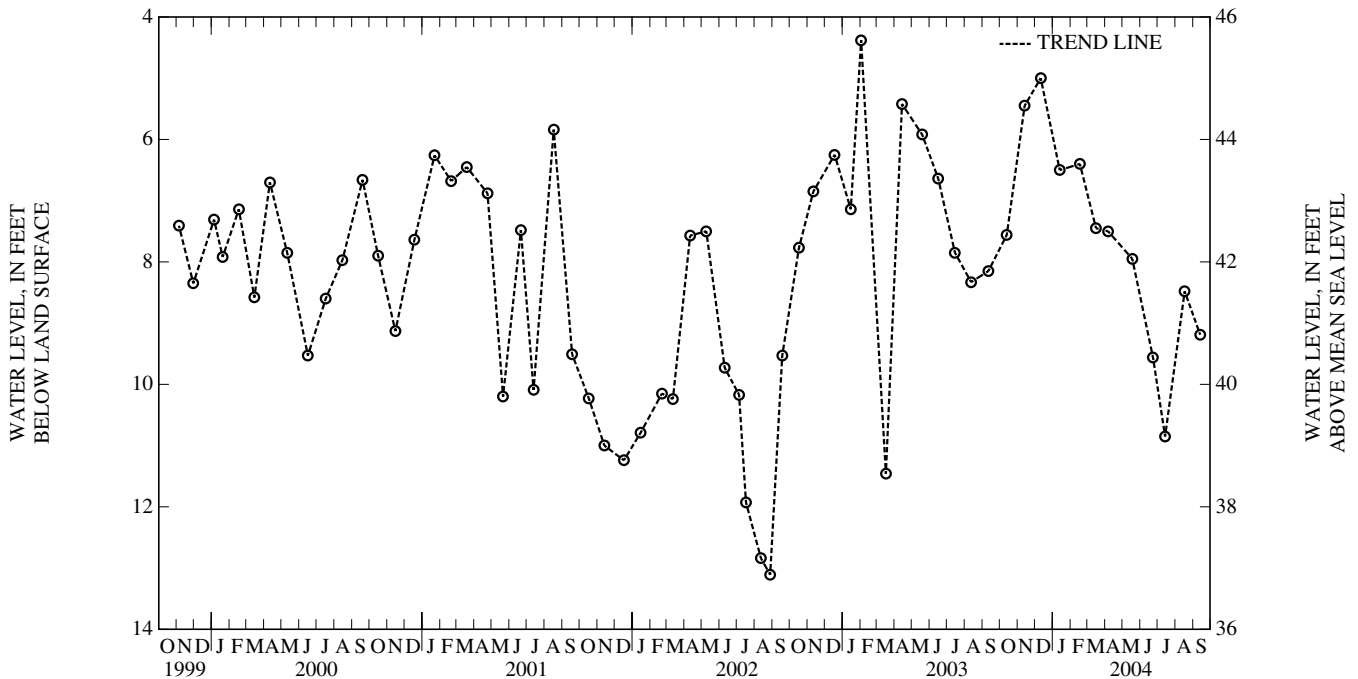
PERIOD OF RECORD.--September 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.66 ft below land surface, January 10, 1994; lowest measured, 13.11 ft below land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	7.56	JAN 13, 2004	6.50	APR 06, 2004	7.50	JUL 14, 2004	10.85
NOV 13	5.45	FEB 17	6.40	MAY 18	7.95	AUG 17	8.48
DEC 11	5.00	MAR 16	7.45	JUN 23	9.56	SEP 13	9.19

HIGHEST 5.00 DEC 11, 2003
 LOWEST 10.85 JUL 14, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Qh54-04. SITE ID.--383050075105201.

LOCATION.--Lat 39°30'50", long 75°10'52", Hydrologic Unit 02060010, at Pyle Center, Omar. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 328 ft; casing diameter 2 in., to 324 ft; screen diameter 2 in., screened from 324 to 328 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level measurements from November 1978 to December 1979. Intermittent water level measurements from March 1980 to February 1985. Monthly water level measurements from April 1985 to November 1988.

DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

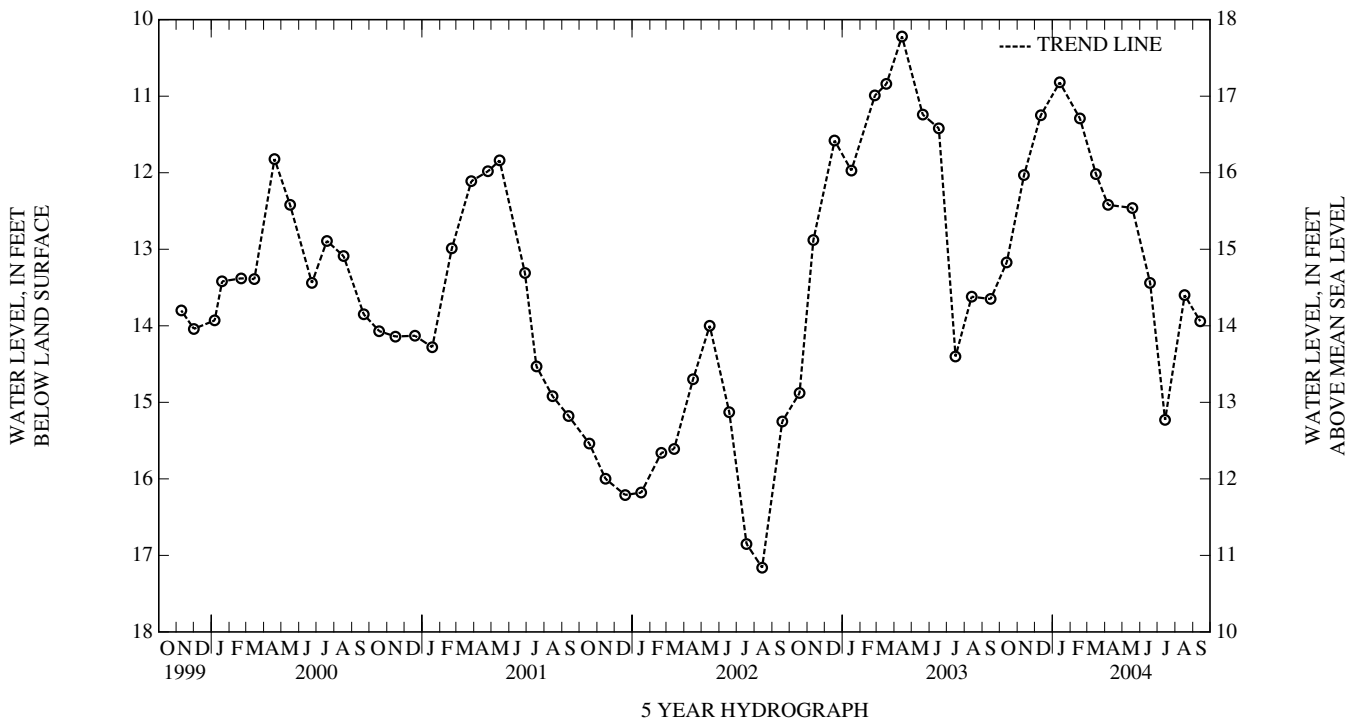
REMARKS.--Delaware Water-Level Network Monitoring observation well.

PERIOD OF RECORD.--November 1978 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.07 ft below land surface, April 2, 1979; lowest measured, 17.16 ft below land surface, August 14, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	13.17	JAN 13, 2004	10.82	APR 06, 2004	12.42	JUL 14, 2004	15.23
NOV 12	12.03	FEB 17	11.29	MAY 18	12.46	AUG 17	13.60
DEC 11	11.25	MAR 16	12.02	JUN 18	13.44	SEP 13	13.94
HIGHEST 10.82 JAN 13, 2004							
LOWEST 15.23 JUL 14, 2004							



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Qh54-05. SITE ID.--383050075105202.

LOCATION.--Lat 39°30'50", long 75°10'52", Hydrologic Unit 02060010, at Pyle Center, Omar. Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 232 ft; casing diameter 2 in., to 229 ft; screen diameter 2 in., screened from 229 to 232 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level measurements from November 1978 to December 1979, and from April 1985 to November 1988. Intermittent water level measurements from March 1980 to February 1985.

DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

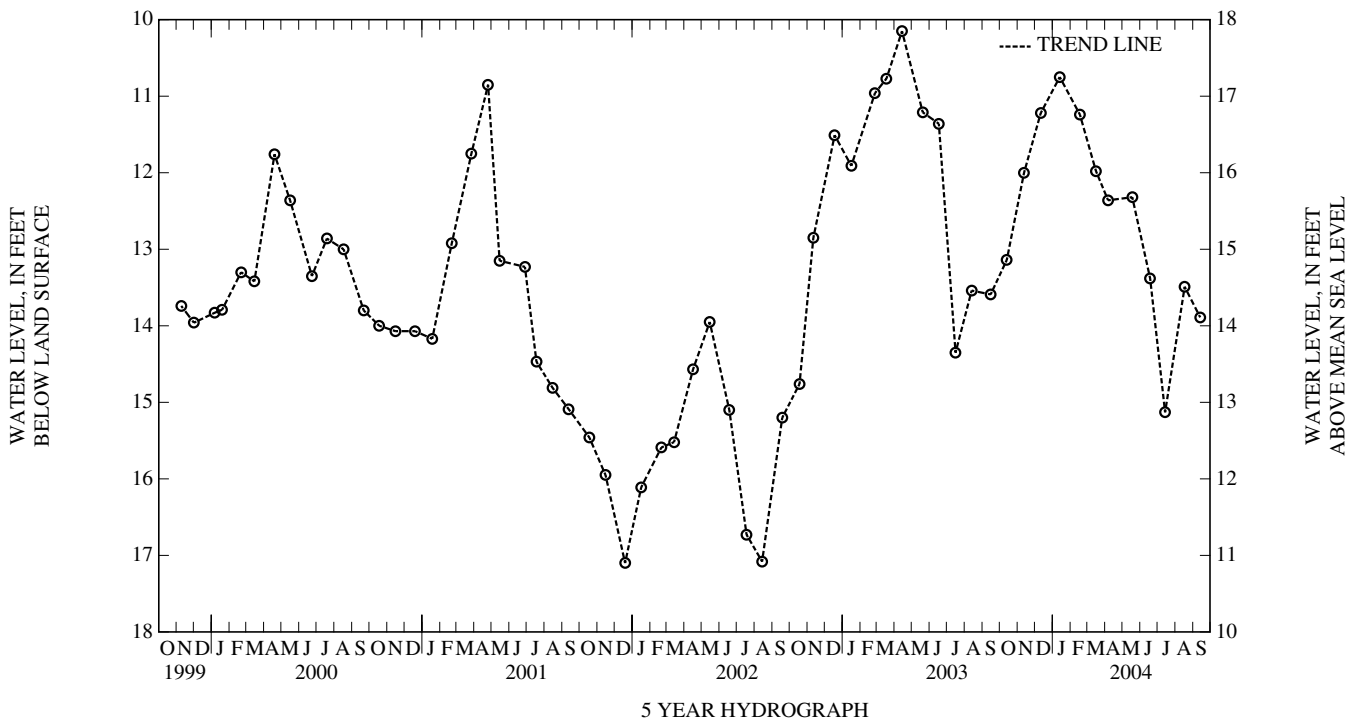
PERIOD OF RECORD.--November 1978 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.63 ft below land surface, March 1, 1979; lowest measured, 17.10 ft below land surface, December 19, 2001.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	13.14	JAN 13, 2004	10.75	APR 06, 2004	12.36	JUL 14, 2004	15.13
NOV 12	12.00	FEB 17	11.24	MAY 18	12.32	AUG 17	13.49
DEC 11	11.22	MAR 16	11.98	JUN 18	13.38	SEP 13	13.89

HIGHEST 10.75 JAN 13, 2004
 LOWEST 15.13 JUL 14, 2004



SUSSEX COUNTY--Continued

WELL NUMBER.--Qh54-06. SITE ID.--383050075105203.

LOCATION.--Lat 39°30'50", long 75°10'52", Hydrologic Unit 02060010, at Pyle Center, Omar. Owner: U.S. Geological Survey.

AQUIFER.--Pocomoke aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 148 ft; casing diameter 2 in., to 144 ft; screen diameter 2 in., screened from 144 to 148 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level measurements from November 1978 to December 1979. Intermittent water level measurements from March 1980 to February 1985. Monthly water level measurements from April 1985 to November 1988.

DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

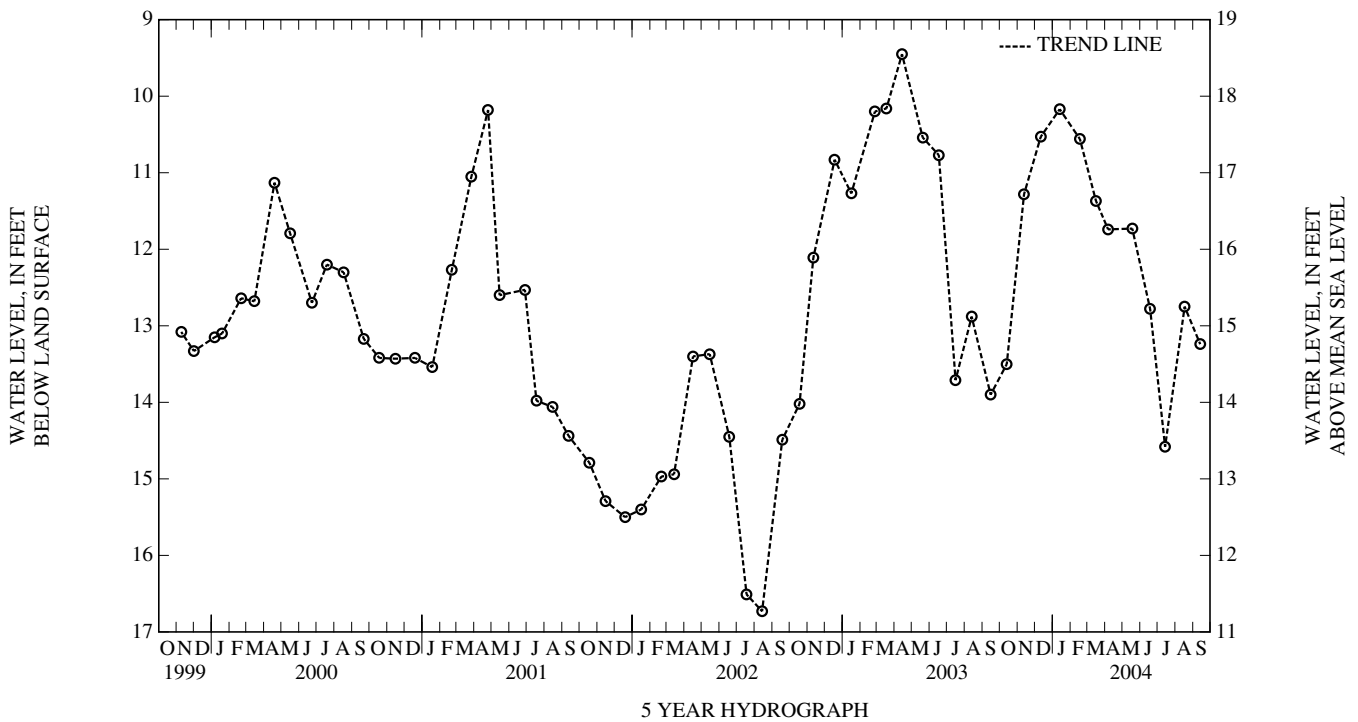
PERIOD OF RECORD.--November 1978 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.95 ft below land surface, March 1, 1979; lowest measured, 17.10 ft below land surface, July 24, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	13.50	JAN 13, 2004	10.17	APR 06, 2004	11.74	JUL 14, 2004	14.58
NOV 12	11.28	FEB 17	10.56	MAY 18	11.73	AUG 17	12.75
DEC 11	10.53	MAR 16	11.37	JUN 18	12.78	SEP 13	13.24

HIGHEST 10.17 JAN 13, 2004
 LOWEST 14.58 JUL 14, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Qh54-07. SITE ID.--383050075105204.

LOCATION.--Lat 39°30'50", long 75°10'52", Hydrologic Unit 02060010, at Pyle Center, Omar. Owner: U.S. Geological Survey.

AQUIFER.--Omar Formation of Pleistocene age. Aquifer code: 112OMAR.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 108 ft; casing diameter 2 in., to 104 ft; screen diameter 2 in., screened from 104 to 108 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level measurements from November 1978 to December 1979, and April 1985 to November 1988. Intermittent water level measurements from March 1980 to February 1985.

DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

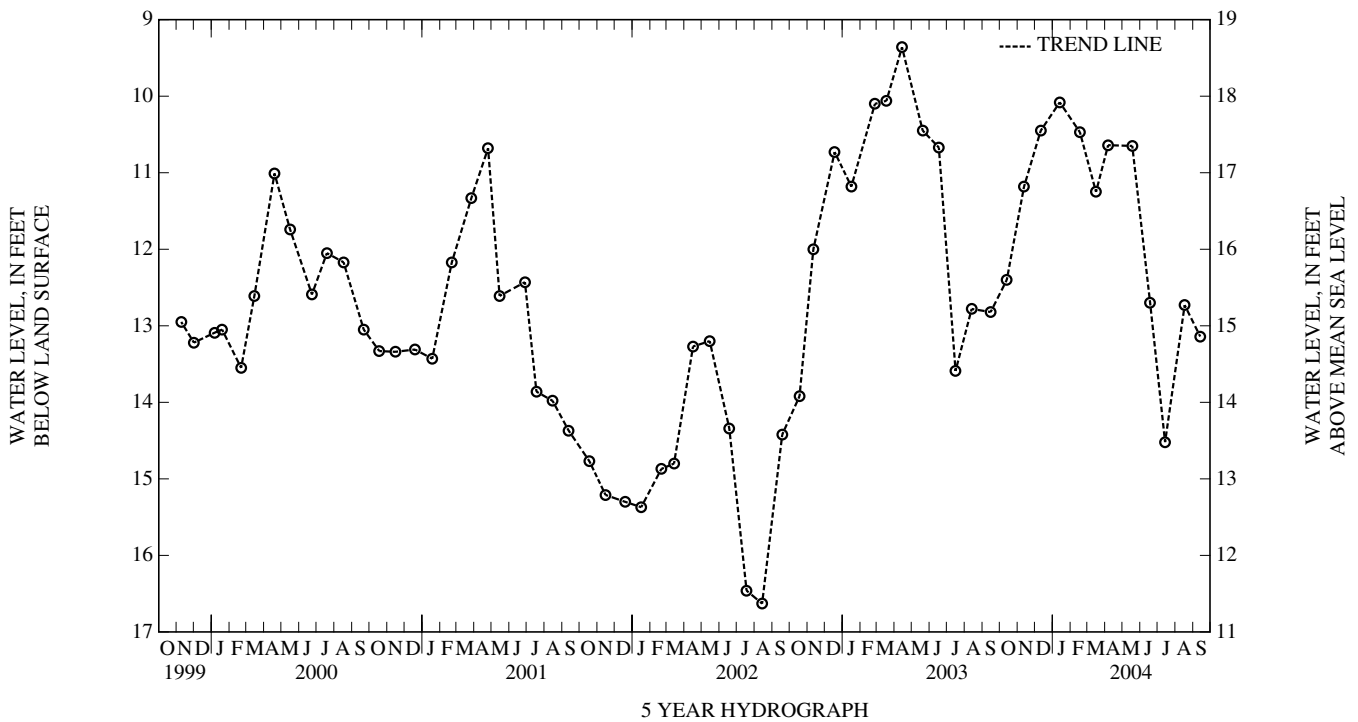
PERIOD OF RECORD.--December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.83 ft below land surface, March 1, 1979; lowest measured, 16.63 ft below land surface, August 14, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	12.40	JAN 13, 2004	10.08	APR 06, 2004	10.64	JUL 14, 2004	14.52
NOV 12	11.18	FEB 17	10.47	MAY 18	10.65	AUG 17	12.73
DEC 11	10.45	MAR 16	11.25	JUN 18	12.70	SEP 13	13.14

HIGHEST 10.08 JAN 13, 2004
 LOWEST 14.52 JUL 14, 2004



5 YEAR HYDROGRAPH
 OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Qj32-17. SITE ID.--383210075035802. PERMIT NUMBER.--45428.

LOCATION.--Lat 38°32'10", long 75°03'58", Hydrologic Unit 02060010, 0.5 mi southwest of intersection with DE Rts. 1 and 26, Bethany Beach. Owner: Town of Bethany Beach.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 400 ft; casing diameter 4 in., to 335 ft; screen diameter 4 in., screened from 335 to 400 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 7 ft. above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

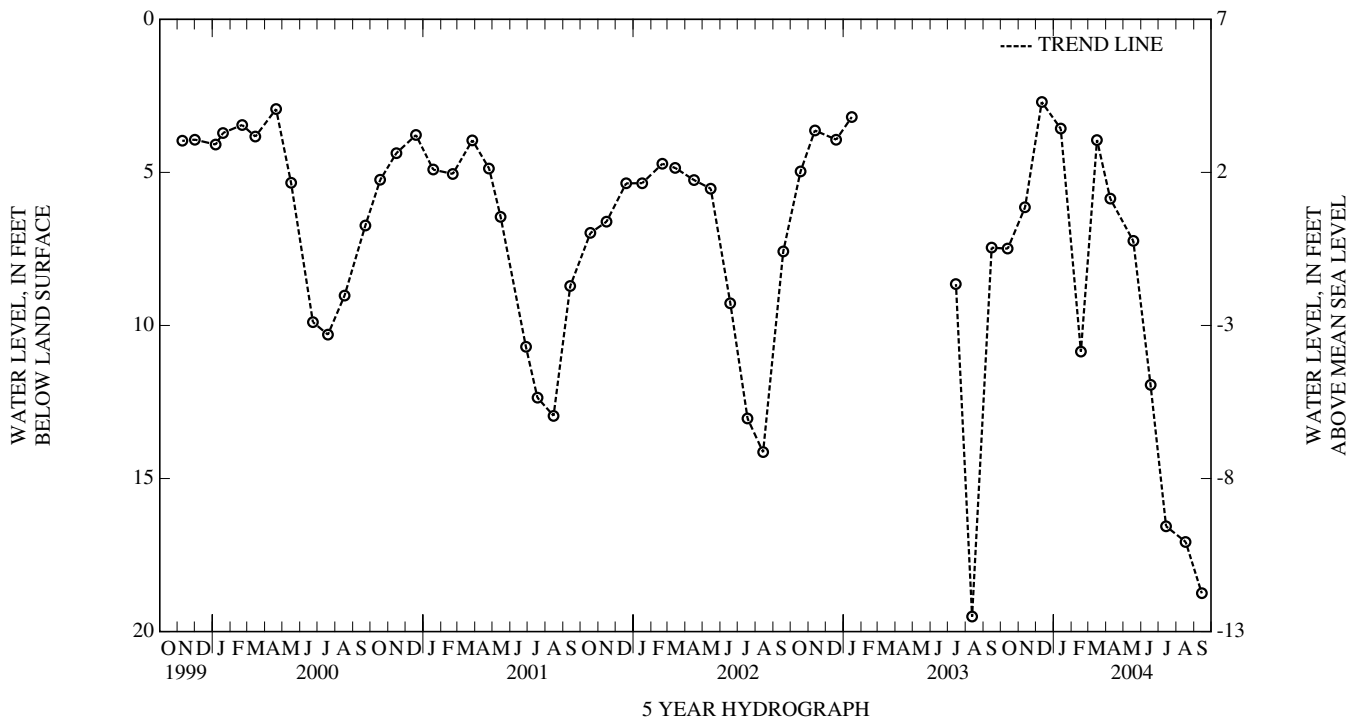
PERIOD OF RECORD.--February 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.12 ft below land surface, April 1, 1993; lowest measured, 19.51 ft below land surface, August 12, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	7.49	JAN 13, 2004	3.57	APR 08, 2004	5.86	JUL 14, 2004	16.56
NOV 12	6.14	FEB 17	10.85	MAY 18	7.24	AUG 17	17.07
DEC 11	2.70	MAR 16	3.94	JUN 17	11.94	SEP 14	18.75

HIGHEST 2.70 DEC 11, 2003
 LOWEST 18.75 SEP 14, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Rj22-05. SITE ID.--382808075030501.

LOCATION.--Lat 38°28'08", long 75°03'05", Hydrologic Unit 02060010, at Fenwick Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 455 ft; casing diameter 1.25 in., to 450 ft; screen diameter 2 in.,screened from 450 to 455 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level measurements from April 1977 to March 1980, and April 1985 to July 1987. Intermittent water level measurements from September 1980 to February 1985.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

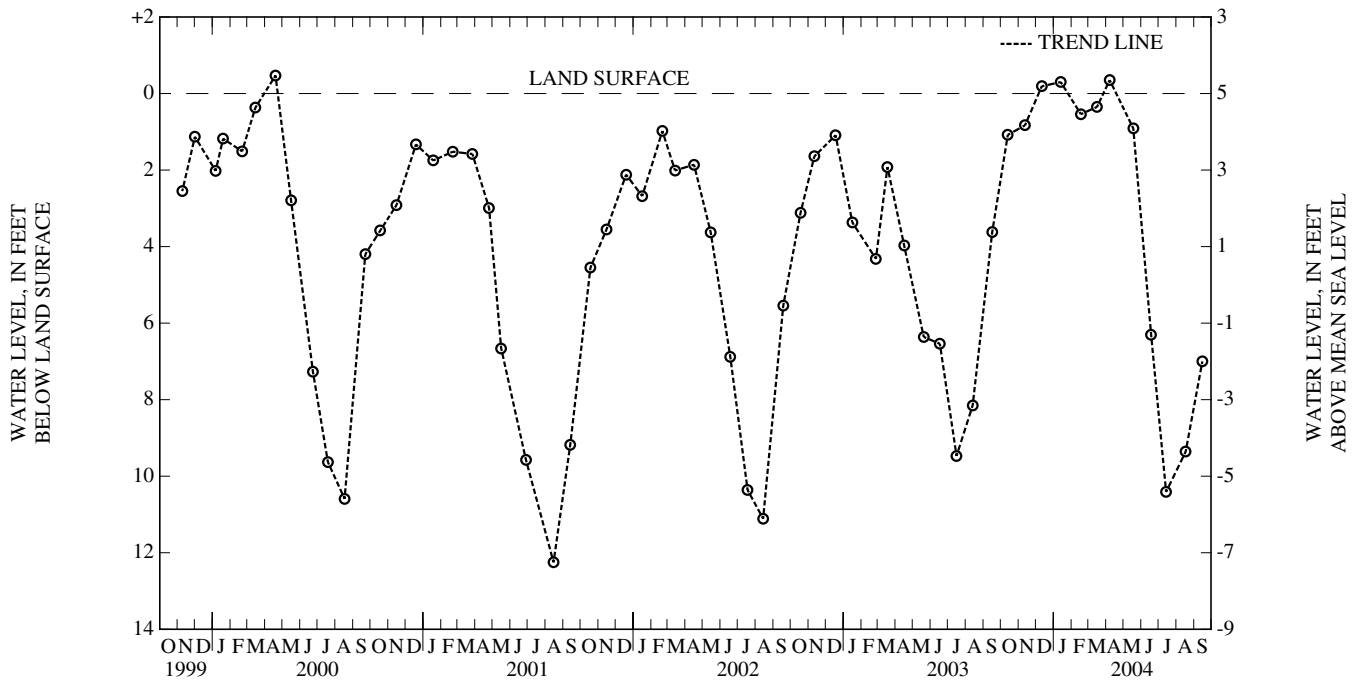
PERIOD OF RECORD.--April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.00 ft above land surface, March 4, 1997; lowest measured, 13.81 ft below land surface, July 30, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	1.08	JAN 13, 2004	+0.30	APR 07, 2004	+0.35	JUL 14, 2004	10.41
NOV 12	.83	FEB 17	.54	MAY 18	.91	AUG 17	9.36
DEC 11	+0.19	MAR 16	.35	JUN 18	6.30	SEP 15	7.00

HIGHEST +0.35 APR 07, 2004
LOWEST 10.41 JUL 14, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Rj22-06. SITE ID.--382808075030502.

LOCATION.--Lat 38°28'08", long 75°03'05", Hydrologic Unit 02060010, at Fenwick Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 295 ft; casing diameter 1.25 in., to 290 ft; screen diameter 2 in., screened from 290 to 295 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level measurements from April 1977 to March 1980, and April 1985 to July 1987. Intermittent water level measurements from September 1980 to February 1985.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well.

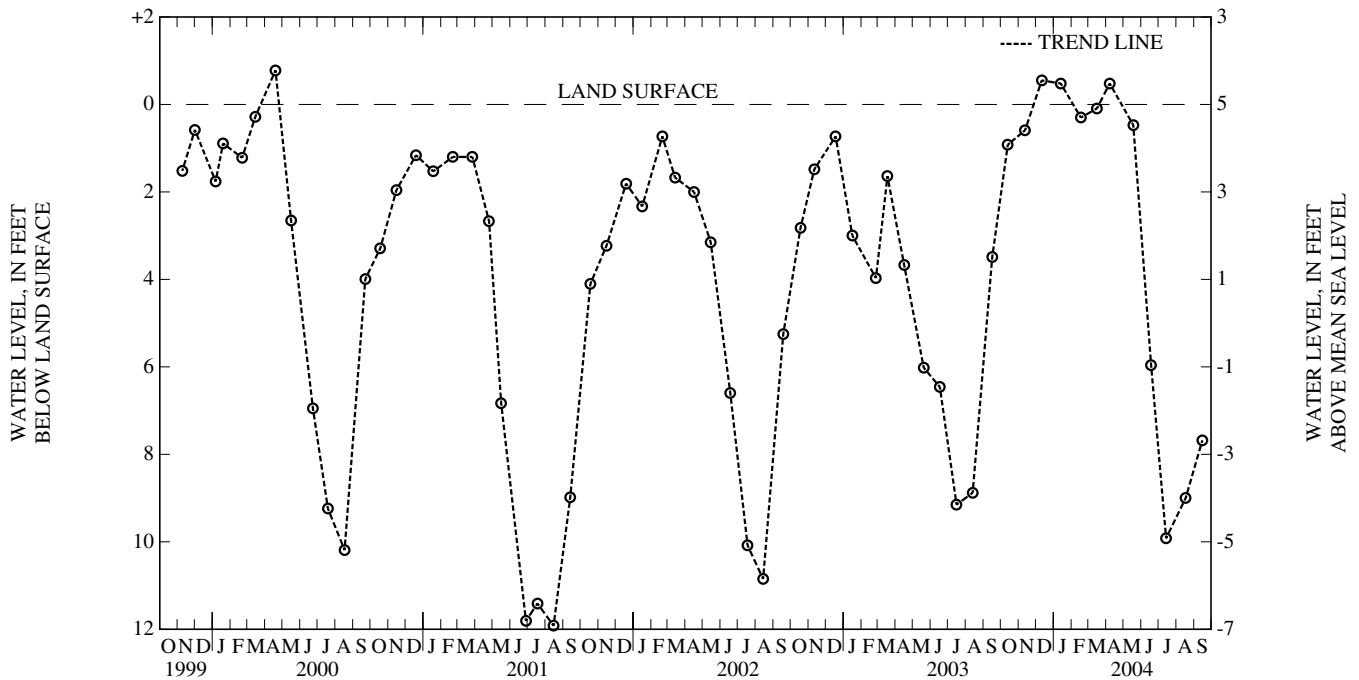
PERIOD OF RECORD.--April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.00 ft above land surface, April 2, 1979, April 4, 1984, and March 4, 1997; lowest measured, 12.86 ft below land surface, July 30, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	.92	JAN 13, 2004	+48	APR 07, 2004	+48	JUL 14, 2004	9.92
NOV 12	.59	FEB 17	.30	MAY 18	.47	AUG 17	9.00
DEC 11	+55	MAR 16	.09	JUN 18	5.96	SEP 15	7.68

HIGHEST +5.55 DEC 11, 2003
LOWEST 9.92 JUL 14, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Rj22-07. SITE ID.--382808075030503.

LOCATION.--Lat 38°28'08", long 75°03'05", Hydrologic Unit 02060010, at Fenwick Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Pocomoke aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 185 ft; casing diameter 1.25 in., to 180 ft; screen diameter 2 in., screened from 180 to 185 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level measurements from April 1977 to March 1980, and April 1985 to July 1987. Intermittent water level measurements were collected from September 1980 to February 1985.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

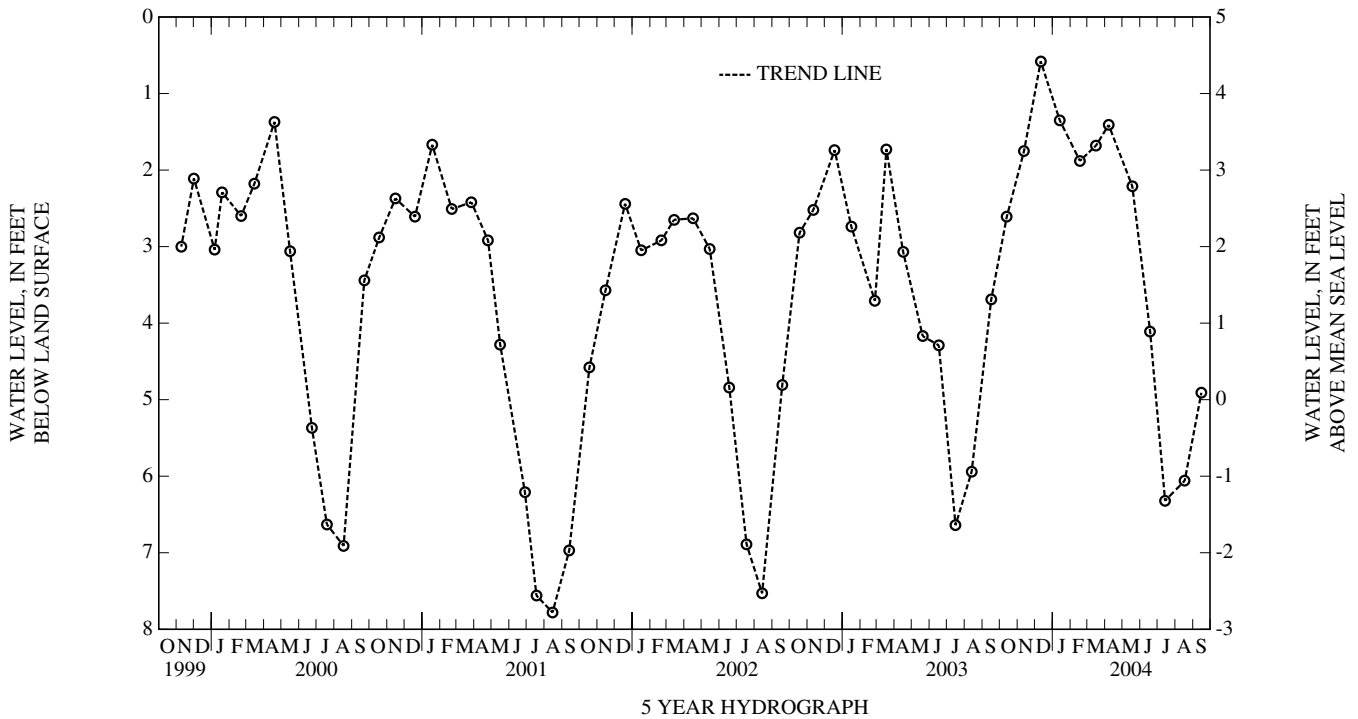
REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affect by local ground-water withdrawal.

PERIOD OF RECORD.--April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.33 ft above land surface, February 20, 1986; lowest measured, 10.00 ft below land surface, August 4, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	2.61	JAN 13, 2004	1.35	APR 07, 2004	1.41	JUL 14, 2004	6.32
NOV 12	1.75	FEB 17	1.88	MAY 18	2.21	AUG 17	6.06
DEC 11	.58	MAR 16	1.68	JUN 18	4.11	SEP 15	4.91
HIGHEST	.58	DEC 11, 2003					
LOWEST	6.32	JUL 14, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SUSSEX COUNTY--Continued

WELL NUMBER.--Rj22-08. SITE ID.--382808075030504.

LOCATION.--Lat 38°28'08", long 75°03'05", Hydrologic Unit 02060010, at Fenwick Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 115 ft; casing diameter 1.25 in., to 110 ft; screen diameter 2 in., screened from 110 to 115 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Delaware Geological Survey personnel. Monthly water level measurements from April 1977 to March 1980, and April 1985 to July 1987. Intermittent water level measurements from September 1980 to February 1985.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Delaware Water-Level Monitoring Network observation well. The water level measurement of 8.20 ft below land surface on August 2, 1999, is the result of nearby ground-water withdrawal due to dewatering during the installation of an underground pipeline.

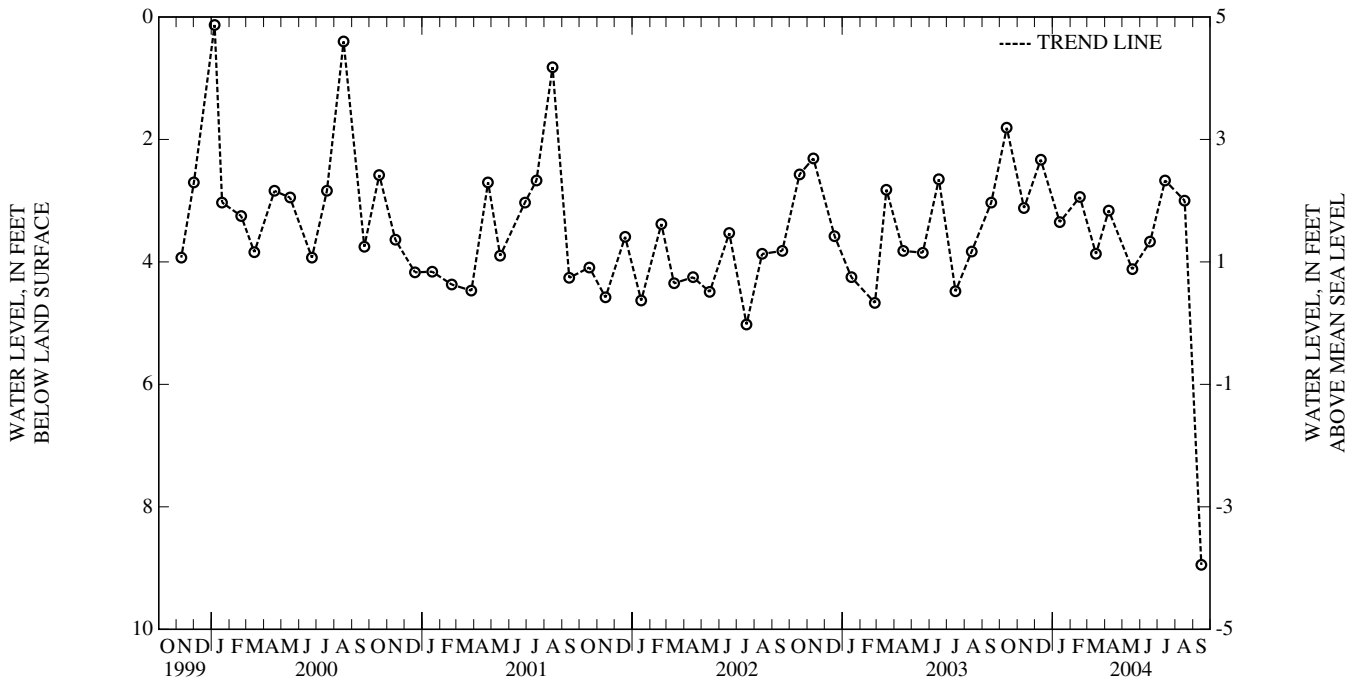
PERIOD OF RECORD.--April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.13 ft below land surface, January 6, 2000; lowest measured, 8.95 ft below land surface, Sept. 15, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2003	1.81	JAN 13, 2004	3.35	APR 07, 2004	3.16	JUL 14, 2004	2.67
NOV 12	3.12	FEB 17	2.94	MAY 18	4.12	AUG 17	3.00
DEC 11	2.33	MAR 16	3.87	JUN 18	3.67	SEP 15	8.95

HIGHEST 1.81 OCT 13, 2003
 LOWEST 8.95 SEP 15, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ALLEGANY COUNTY

WELL NUMBER.--AL Ah 1. SITE ID.--394024078273401.

LOCATION.--Lat 39°40'24", long 78°27'34", Hydrologic Unit 02070003, near Fifteen Mile Creek, 2.8 mi southeast of Pratt. Owner: Green Ridge State Forest.

AQUIFER.--Brallier Formation of Upper Devonian Age. Aquifer code: 341BRLR.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, reported depth 300 ft, measured depth 114.5 ft; casing diameter 8 in., to unknown depth; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 720 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of sanitary seal in casing, 0.25 ft above land surface.

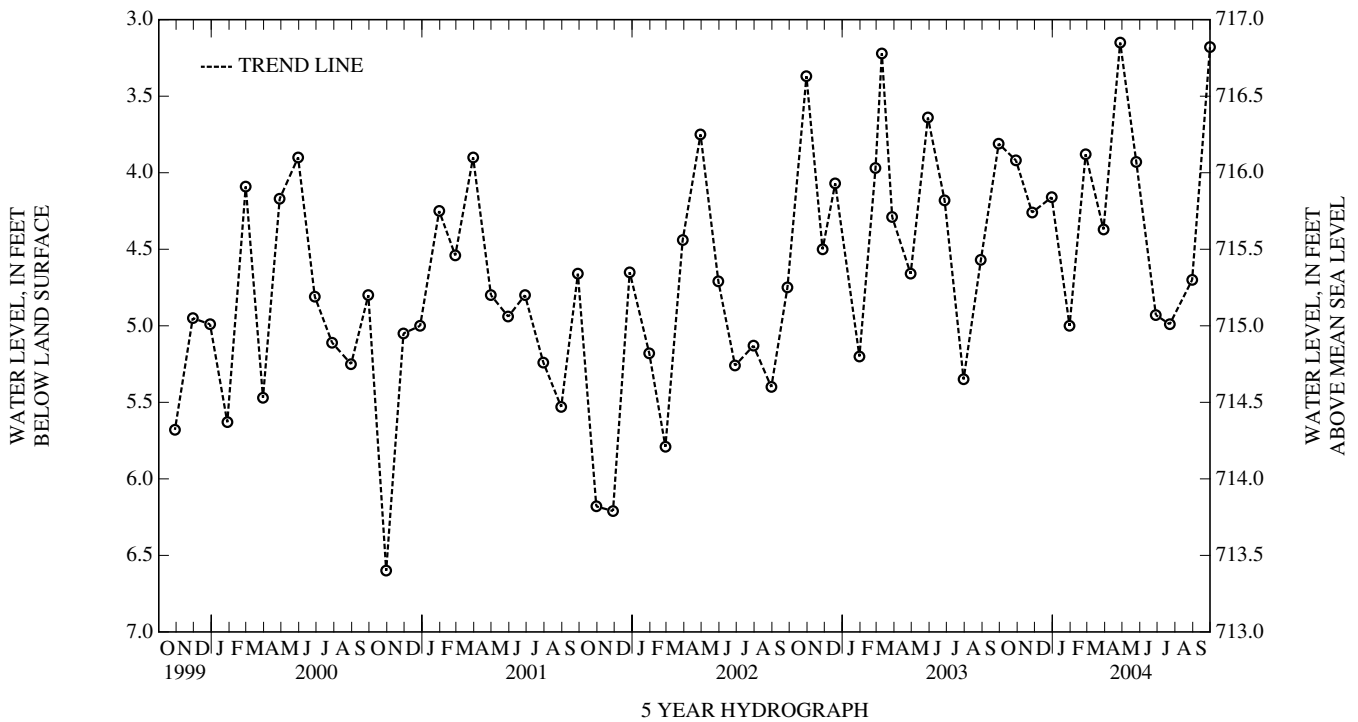
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level was more than 40 ft below land surface on November 19, 1969, and February 12, 1970, when well was being pumped. Water levels may be affected by local ground-water withdrawal.

PERIOD OF RECORD.--December 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.80 ft below land surface, May 18, 1978; lowest measured 19.75 ft below land surface, July 17, 1968.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	3.92	JAN 30, 2004	5.00	APR 27, 2004	3.15	JUL 22, 2004	4.99
NOV 26	4.26	FEB 27	3.88	MAY 25	3.93	AUG 30	4.70
DEC 30	4.16	MAR 29	4.37	JUN 28	4.93	SEP 30	3.18
HIGHEST	3.15	APR 27, 2004					
LOWEST	5.00	JAN 30, 2004					



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GROUND-WATER LEVELS IN MARYLAND

ALLEGANY COUNTY—Continued

WELL NUMBER.--AL Ca 20. SITE ID.--393148079010601. PERMIT NUMBER.--AL-81-0477.

LOCATION.--Lat 39°31'48", long 79°01'06", Hydrologic Unit 02070002, at Barton Municipal Park. Owner: Town of Barton.

AQUIFER.--Conemaugh Group of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 71 ft; casing diameter 8 in., to 20 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 1,250 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.70 ft above land surface through June 2003, 4.00 ft above land surface from July 2003 to present.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--March 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.05 ft below land surface, March 11, 2003; lowest measured, 26.00 ft below land surface, March 17, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

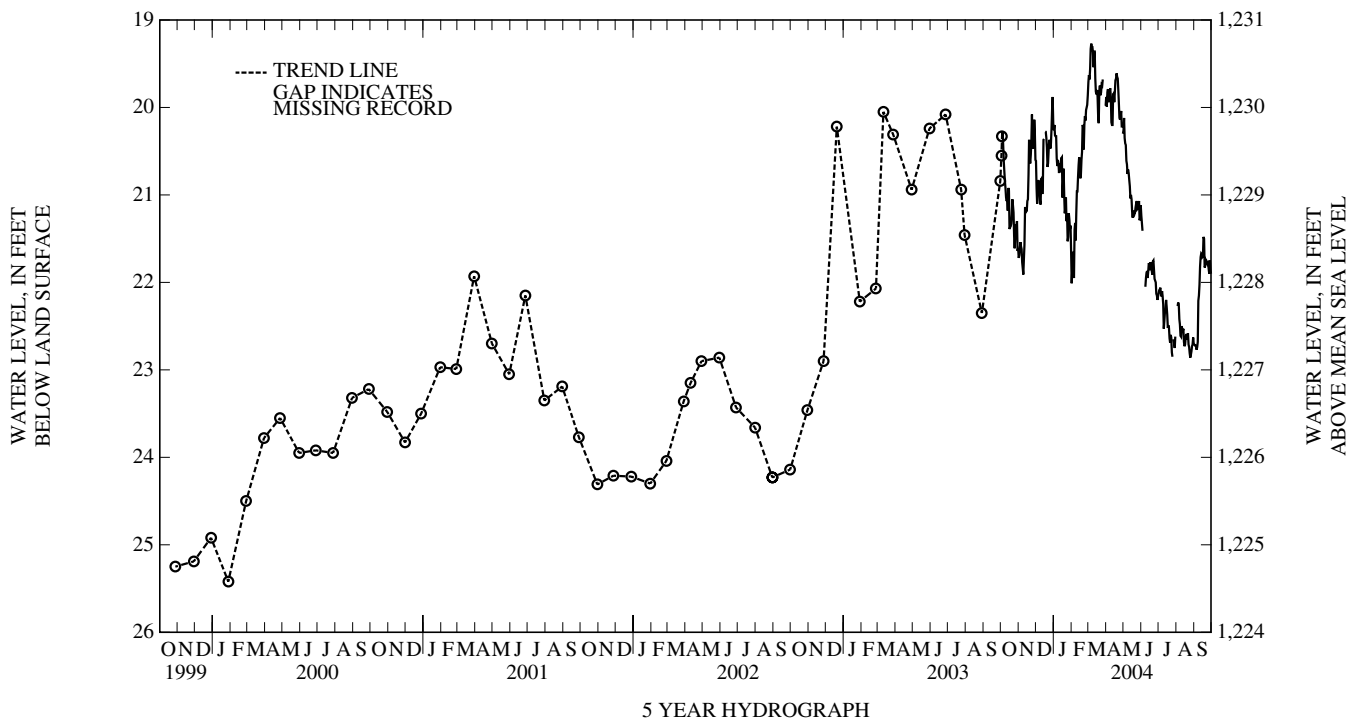
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	20.55	FEB 27, 2004	20.02	MAY 24, 2004	21.09	AUG 27, 2004	22.83
31	21.60	MAR 08	19.38	JUN 07	21.98	SEP 10	22.10
NOV 25	20.43	14	20.42	23	21.90	20	21.84
DEC 10	21.19	29	19.94	29	22.27	22	21.79
15	20.55	30	20.05	JUL 09	22.51		
29	20.10	APR 27	20.06	22	22.63		
JAN 30, 2004	21.40	29	20.42	AUG 02	22.45		
	HIGHEST 19.38	MAR 08, 2004					
	LOWEST 22.83	AUG 27, 2004					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	---	---	21.84	21.72	20.92	20.61	20.40	20.26	22.09	22.01	19.88	19.71
2	---	---	21.84	21.69	21.10	20.92	20.39	20.20	22.09	21.86	19.78	19.63
3	20.58	20.33	21.73	21.60	21.19	21.10	20.36	20.32	21.89	21.65	19.80	19.68
4	20.43	20.27	21.65	21.54	21.15	20.94	20.38	20.33	22.19	21.89	19.68	19.56
5	20.61	20.43	21.64	21.59	20.94	20.83	20.58	20.33	22.22	21.95	19.61	19.33
6	20.73	20.61	21.84	21.62	20.98	20.86	20.72	20.58	21.95	21.40	19.56	19.27
7	20.84	20.73	21.84	21.77	21.08	20.97	20.72	20.67	21.52	21.32	19.56	19.31
8	20.93	20.84	22.04	21.84	21.14	21.07	20.68	20.60	21.66	21.52	19.40	19.31
9	21.07	20.92	22.05	21.91	21.34	21.11	20.75	20.63	21.58	21.21	19.54	19.37
10	21.07	21.03	21.91	21.73	21.35	20.82	20.86	20.75	21.21	20.96	19.62	19.54
11	21.16	21.07	21.76	21.57	21.02	20.81	20.87	20.65	21.03	20.96	19.59	19.36
12	21.18	21.05	21.57	21.15	21.04	20.99	20.80	20.65	21.00	20.80	19.67	19.36
13	21.26	21.18	21.33	21.15	21.03	20.86	20.88	20.74	20.81	20.66	19.95	19.67
14	21.24	20.92	21.33	21.19	20.86	20.37	20.88	20.58	20.68	20.57	19.95	19.82
15	21.40	20.95	21.29	21.18	20.66	20.36	21.04	20.57	20.81	20.67	20.01	19.85
16	21.45	21.39	21.19	21.07	---	---	21.17	21.03	20.92	20.81	19.99	19.80
17	21.44	21.37	21.11	21.05	20.41	20.28	21.17	20.87	20.90	20.77	20.11	19.88
18	21.45	21.36	21.07	20.77	20.37	20.28	21.00	20.70	20.77	20.60	20.21	20.11
19	21.48	21.33	20.77	20.37	20.46	20.35	21.21	21.00	20.62	20.51	20.46	20.18
20	21.52	21.22	20.77	20.57	20.79	20.46	21.37	21.21	20.54	20.20	20.44	19.81
21	21.22	21.05	20.76	20.64	20.80	20.68	21.37	21.15	20.48	20.22	19.88	19.75
22	21.23	21.12	20.68	20.54	20.68	20.64	21.41	21.03	20.59	20.48	19.94	19.86
23	21.47	21.20	20.60	20.38	20.66	20.49	21.46	21.30	20.54	20.20	19.92	19.83
24	21.74	21.47	20.39	20.08	20.49	20.37	21.56	21.21	20.20	20.10	19.86	19.74
25	21.75	21.61	20.51	20.39	20.50	20.40	21.65	21.53	20.17	20.15	19.78	19.75
26	21.70	21.46	20.58	20.47	20.51	20.47	21.54	21.48	20.16	20.03	19.77	19.68
27	21.48	21.34	20.59	20.44	20.50	20.41	21.48	21.21	20.07	20.00	---	---
28	21.49	21.36	20.45	20.14	20.41	20.24	21.50	21.28	20.06	19.97	---	---
29	21.64	21.30	20.66	20.28	20.24	20.01	21.45	21.39	19.98	19.86	---	---
30	21.80	21.64	20.66	20.60	20.29	19.88	21.64	21.35	---	---	---	---
31	21.82	21.61	---	---	20.33	20.19	22.01	21.64	---	---	20.05	19.98
MONTH	21.82	20.27	22.05	20.08	21.35	19.88	22.01	20.20	22.22	19.86	20.46	19.27

GROUND-WATER LEVELS IN MARYLAND
ALLEGANY COUNTY—Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20.00	19.88	20.33	20.26	21.32	21.24	22.20	22.13	---	---	22.78	22.71
2	20.09	19.99	20.35	20.12	21.43	21.32	22.18	22.09	---	---	22.78	22.72
3	20.09	19.83	20.45	20.35	21.60	21.41	22.16	22.08	22.38	22.27	22.77	22.72
4	19.94	19.79	20.52	20.41	---	---	22.14	22.06	22.28	22.23	22.77	22.73
5	20.03	19.94	20.61	20.43	---	---	22.20	22.12	22.42	22.25	22.81	22.77
6	20.04	19.89	20.66	20.61	---	---	22.21	22.16	22.48	22.42	22.83	22.74
7	19.89	19.81	20.82	20.65	---	---	22.17	22.10	22.61	22.48	22.74	22.68
8	19.88	19.78	20.88	20.76	22.12	22.05	22.25	22.16	22.68	22.61	22.70	22.21
9	20.17	19.88	20.77	20.71	22.07	21.95	22.56	22.25	22.72	22.62	22.21	22.15
10	20.23	20.17	20.83	20.75	21.95	21.89	22.59	22.53	22.63	22.50	22.21	22.03
11	20.34	20.20	20.91	20.83	21.96	21.87	22.54	22.44	22.61	22.53	22.03	21.82
12	20.34	20.20	21.13	20.90	22.04	21.95	22.45	22.34	22.66	22.56	21.82	21.71
13	20.20	19.85	21.13	21.04	22.04	21.87	22.38	22.31	22.69	22.53	21.74	21.67
14	19.97	19.84	21.09	21.00	21.88	21.78	22.32	22.20	22.76	22.68	21.73	21.68
15	20.03	19.94	21.19	21.05	21.87	21.80	22.39	22.28	22.81	22.73	21.75	21.71
16	20.00	19.82	21.29	21.19	21.96	21.86	22.55	22.37	22.76	22.71	21.73	21.70
17	19.84	19.69	21.35	21.26	21.90	21.77	22.60	22.52	22.74	22.63	21.73	21.48
18	19.76	19.67	21.32	21.18	21.90	21.84	22.57	22.49	22.68	22.59	21.83	21.50
19	19.69	19.61	21.28	21.20	21.97	21.86	22.64	22.52	22.73	22.64	21.88	21.83
20	19.73	19.65	21.28	21.22	21.99	21.91	22.73	22.64	22.73	22.64	21.93	21.81
21	19.80	19.67	21.30	21.20	21.92	21.76	22.73	22.69	22.75	22.58	21.83	21.74
22	19.97	19.80	21.22	21.14	21.86	21.75	22.70	22.60	22.78	22.71	21.81	21.75
23	20.12	19.96	21.16	21.10	21.96	21.86	22.80	22.63	22.82	22.74	21.85	21.77
24	20.28	20.12	21.16	21.07	22.05	21.96	22.91	22.80	22.88	22.81	21.85	21.79
25	20.28	20.14	21.31	21.16	22.06	21.98	22.93	22.85	22.93	22.86	21.85	21.78
26	20.15	20.10	21.23	21.15	22.13	22.00	---	---	22.94	22.83	21.93	21.85
27	20.23	20.04	21.18	21.11	22.22	22.13	22.70	22.65	22.89	22.79	21.96	21.90
28	20.35	20.23	21.29	21.07	22.23	22.15	22.80	22.70	22.86	22.73	21.90	21.75
29	---	---	21.47	21.29	22.27	22.20	22.85	22.75	22.80	22.71	21.91	21.85
30	20.40	20.30	21.47	21.26	22.25	22.16	22.78	22.62	22.75	22.63	21.99	21.90
31	---	---	21.26	21.12	---	---	---	---	22.78	22.70	---	---
MONTH	20.40	19.61	21.47	20.12	22.27	21.24	22.93	22.06	22.94	22.23	22.83	21.48
YEAR	22.94	19.27										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY

WELL NUMBER.--AA Ac 11. SITE ID.--391101076404001. PERMIT NUMBER.--AA-00-2445.

LOCATION.--Lat 39°11'01", long 76°40'40", Hydrologic Unit 02060003, Baltimore-Washington International Airport. Owner: Maryland Department of Transportation.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 320 ft; casing diameter 6 in., to 312 ft; screened from 312 to 320 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 136.9 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.00 above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Well used during construction of airport. Water level reported by driller as 90 ft below land surface, April 23, 1948. Water levels are affected by local ground-water withdrawal.

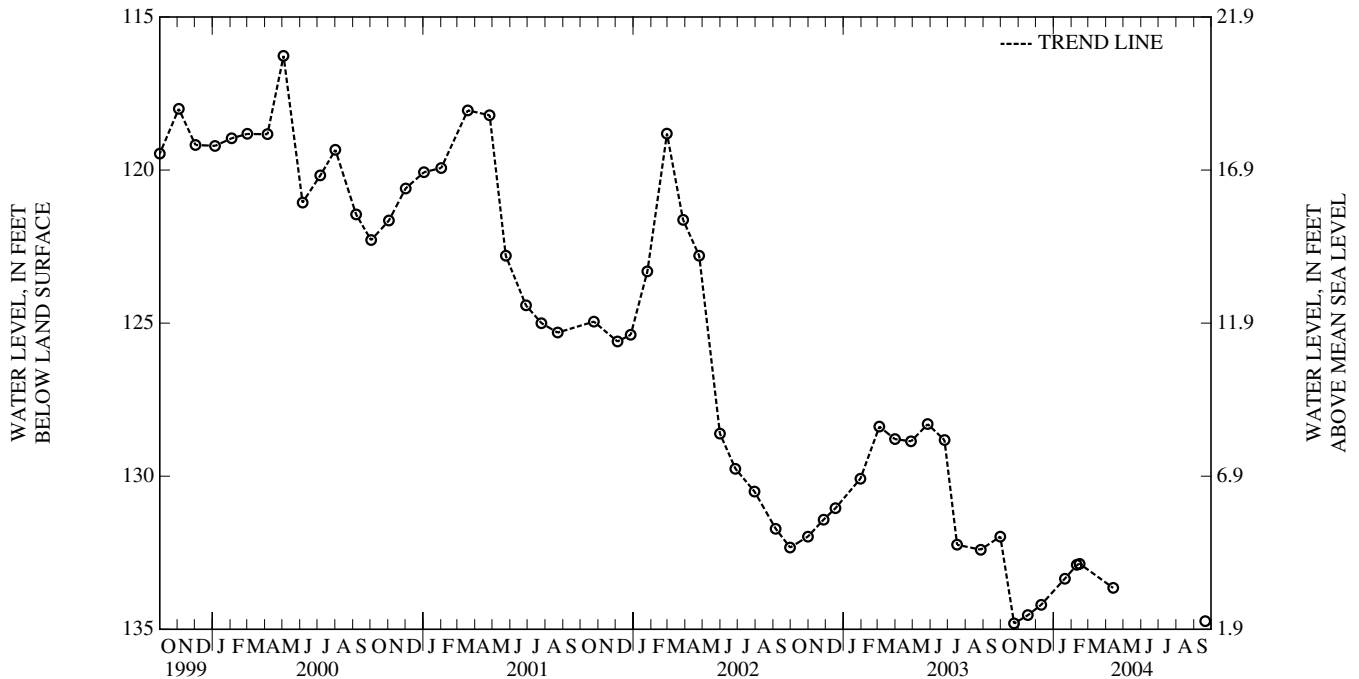
PERIOD OF RECORD.--June 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.60 ft below land surface, March 9, 1965; lowest measured, 134.81 ft below land surface, October 24, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	134.81	DEC 10, 2003	134.20	FEB 10, 2004	132.90	APR 13, 2004	133.65
NOV 17	134.54	JAN 20, 2004	133.35	15	132.86	SEP 20	134.74

HIGHEST 132.86 FEB 15, 2004
 LOWEST 134.81 OCT 24, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 29. SITE ID.--391015076373501.

LOCATION.--Lat 39°10'15", long 76°37'35", Hydrologic Unit 02060003, near Linden Lane, Glen Burnie, near the Anne Arundel County Department of Public Works office. Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 500 ft; casing diameter 3 in., to 395 ft, and from 400 to 420 ft; casing diameter 2 in. from 420 to 460 ft; screened with 3 in. slotted pipe from 395 to 400 ft; screened with 2 in., slotted pipe from 460 to 500 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with graphic water-level recorder from July 19, 1948 to January 18, 1968.

DATUM.--Elevation of land surface is 37.0 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.85 ft above land surface. Prior to December 5, 1972, measuring point was 16.3 ft above land surface.

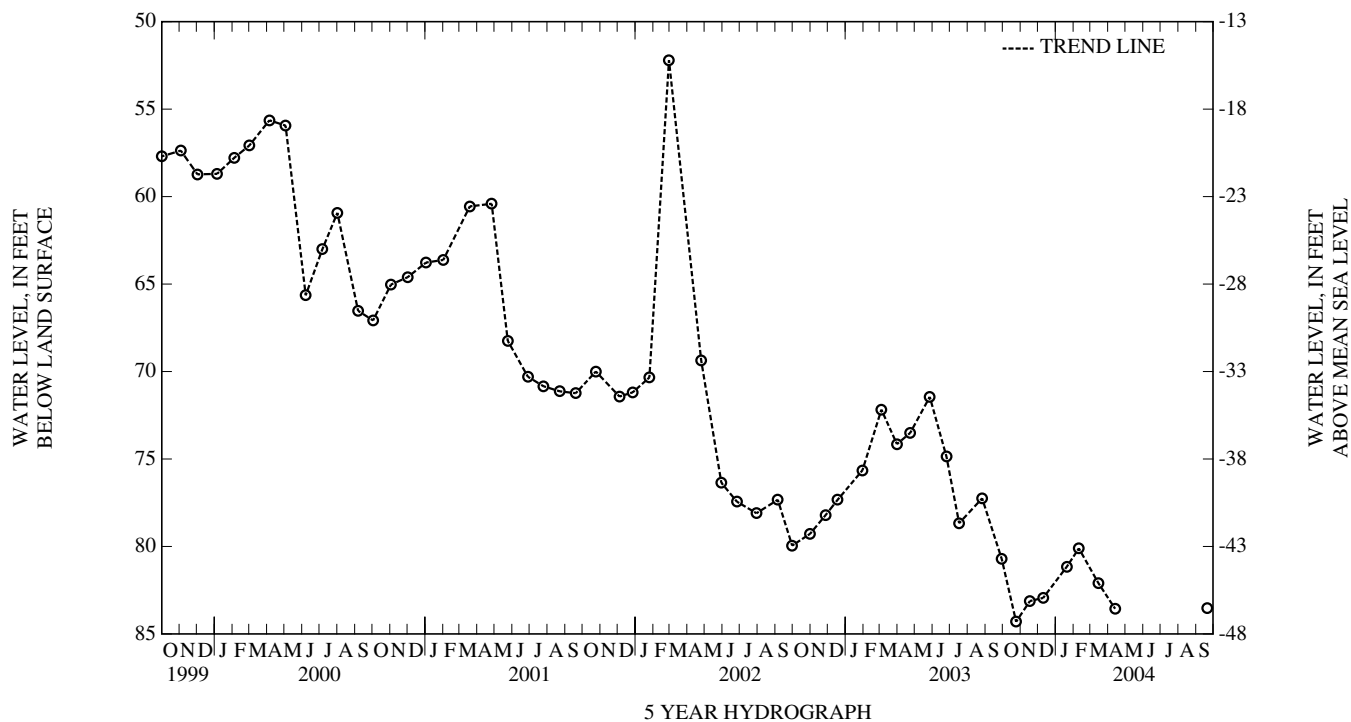
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--June 1948 to February 1968, April 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.04 ft above land surface, September 2, 1952; lowest measured, 84.30 ft below land surface, October 24, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	84.30	DEC 10, 2003	82.94	FEB 10, 2004	80.11	APR 13, 2004	83.56
NOV 17	83.12	JAN 20, 2004	81.16	MAR 15	82.10	SEP 20	83.52
HIGHEST 80.11 FEB 10, 2004							
LOWEST 84.30 OCT 24, 2003							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 90. SITE ID.--391032076385902. PERMIT NUMBER.--AA-04-0298.

LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Aviation Blvd., 0.5 mi north of Dorsey Road intersection. Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 453 ft; casing diameter 6 in., to 443 ft; screen diameter 6 in., from 443 to 453 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with graphic water-level recorder from August 1977 to September 1979. Periodic measurements from September 1979 to March 1980. Equipped with digital water-level recorder--30-minute recorder interval from March 1980 to December 1984, and August 1989 to current year.

DATUM.--Elevation of land surface is 77.85 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.20 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.87 ft above sea level, November 20, 1978 (recorder); lowest measured, 73.00 ft below sea level, October 24, 2003.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

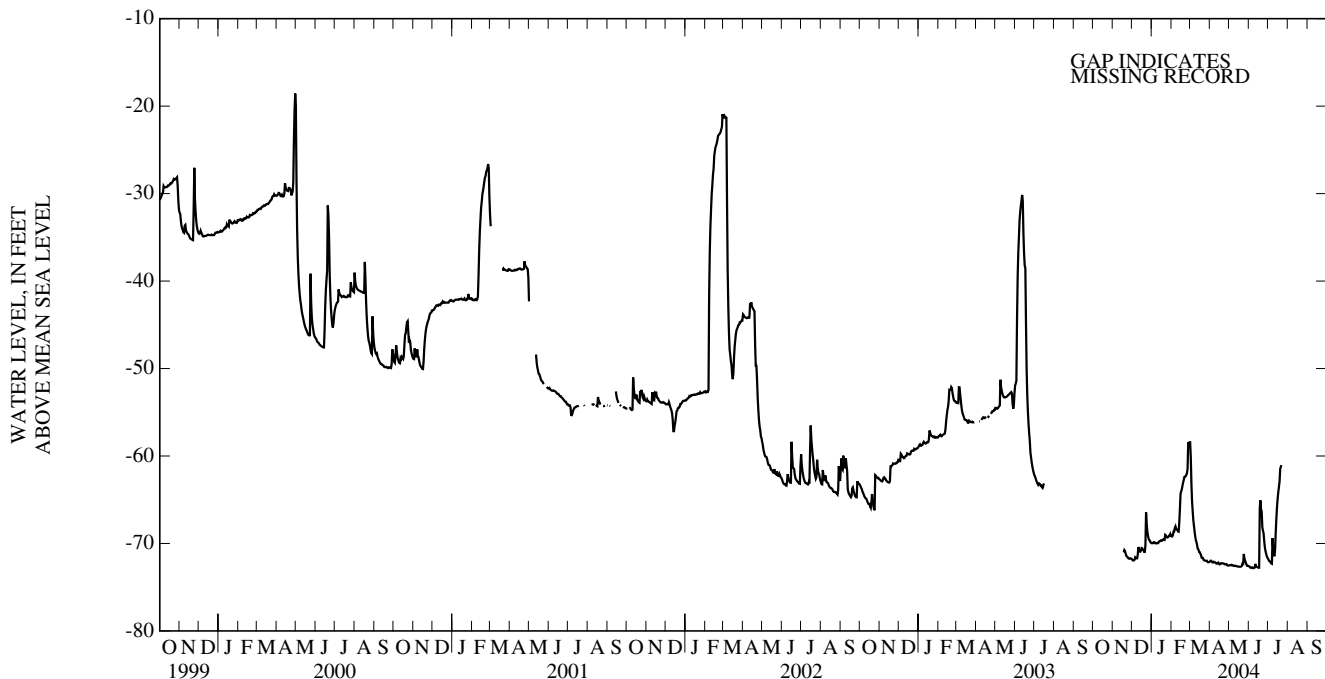
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	-73.00	JAN 20, 2004	-69.50	APR 13, 2004	-72.15	JUL 23, 2004	-60.76
NOV 17	-71.11	FEB 10	-68.37	JUN 02	-72.64	SEP 20	-72.17
DEC 10	-71.27	MAR 15	-70.87	23	-66.70		
LOWEST -73.00 OCT 24, 2003							
HIGHEST -60.76 JUL 23, 2004							

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	-71.70	-71.81	-69.88	-69.98	-69.11	-69.20	-58.42	-58.43
2	---	---	---	---	-71.81	-71.92	-69.86	-69.98	-69.04	-69.20	-58.42	-60.15
3	---	---	---	---	-71.92	-71.95	-69.83	-69.92	-68.27	-69.04	-60.15	-63.21
4	---	---	---	---	-71.85	-71.94	-69.73	-69.85	-68.54	-68.64	-63.21	-65.19
5	---	---	---	---	-71.56	-71.85	-69.72	-69.85	-68.23	-68.63	-65.19	-66.35
6	---	---	---	---	-71.53	-71.59	-69.85	-69.97	-67.70	-68.23	-66.35	-67.37
7	---	---	---	---	-71.59	-71.67	-69.93	-69.98	-67.73	-68.06	-67.37	-67.98
8	---	---	---	---	-71.66	-71.70	-69.91	-69.99	-68.06	-68.38	-67.98	-68.68
9	---	---	---	---	-71.08	-71.70	-69.87	-69.94	-68.35	-68.40	-68.68	-69.22
10	---	---	---	---	-69.95	-71.28	-69.92	-69.96	-68.35	-68.44	-69.22	-69.64
11	---	---	---	---	-69.97	-70.41	-69.79	-69.96	-68.44	-68.62	-69.64	-69.86
12	---	---	---	---	-70.41	-70.74	-69.69	-69.79	-67.57	-68.65	-69.86	-70.23
13	---	---	---	---	-70.74	-70.92	-69.61	-69.76	-65.99	-67.57	-70.23	-70.63
14	---	---	---	---	-70.67	-70.94	-69.53	-69.74	-64.32	-65.99	-70.63	-70.69
15	---	---	---	---	-70.31	-70.80	-69.51	-69.65	-64.05	-64.32	-70.69	-70.96
16	---	---	---	---	-70.43	-70.52	-69.62	-69.67	-63.79	-64.05	-70.91	-70.99
17	---	---	---	---	-70.42	-70.55	-69.58	-69.67	-63.41	-63.79	-70.99	-71.17
18	---	---	-70.76	-71.02	-70.55	-70.69	-69.28	-69.58	-63.02	-63.41	-71.17	-71.31
19	---	---	-70.25	-70.76	-70.69	-70.78	-69.43	-69.54	-62.77	-63.02	-71.31	-71.63
20	---	---	-70.32	-70.86	-70.78	-70.97	-69.51	-69.60	-62.39	-62.77	-71.52	-71.66
21	---	---	-70.86	-71.15	-70.21	-70.97	-68.92	-69.60	-62.32	-62.39	-71.52	-71.66
22	---	---	-71.15	-71.39	-62.72	-70.21	-68.84	-69.02	-62.32	-62.35	-71.66	-71.86
23	---	---	-71.39	-71.50	-64.17	-66.46	-69.02	-69.09	-62.15	-62.32	-71.86	-71.93
24	---	---	-71.39	-71.55	-66.46	-67.75	-69.03	-69.25	-61.97	-62.15	-71.91	-71.96
25	---	---	-71.55	-71.68	-67.75	-68.62	-69.25	-69.32	-61.38	-61.97	-71.92	-71.97
26	---	---	-71.66	-71.73	-68.62	-69.11	-69.21	-69.30	-58.43	-61.44	-71.94	-71.98
27	---	---	-71.68	-71.74	-69.11	-69.47	-69.02	-69.23	-58.43	-58.45	-71.94	-71.97
28	---	---	-71.45	-71.69	-69.47	-69.63	-69.04	-69.11	-58.43	-59.03	-71.97	-72.09
29	---	---	-71.49	-71.72	-69.63	-69.67	-68.81	-69.12	-58.43	-58.43	-72.09	-72.15
30	---	---	-71.70	-71.74	-69.63	-69.88	-68.80	-68.92	---	---	-72.12	-72.15
31	---	---	---	---	-69.85	-69.92	-68.92	-69.11	---	---	-72.06	-72.12
MONTH	---	---	-70.25	-71.74	-62.72	-71.95	-68.80	-69.99	-58.43	-69.20	-58.42	-72.15

ANNE ARUNDEL COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-71.86	-72.07	-72.48	-72.51	-72.52	-72.60	-71.63	-71.76	---	---	---	---
2	-71.90	-71.97	-72.40	-72.49	-72.60	-72.65	-71.76	-71.89	---	---	---	---
3	-71.96	-71.98	-72.44	-72.48	-72.65	-72.75	-71.89	-72.03	---	---	---	---
4	-71.95	-72.08	-72.34	-72.50	-72.75	-72.78	-72.03	-72.06	---	---	---	---
5	-72.08	-72.17	-72.37	-72.44	-72.67	-72.78	-72.06	-72.16	---	---	---	---
6	-72.05	-72.18	-72.44	-72.48	-72.67	-72.73	-72.16	-72.28	---	---	---	---
7	-72.03	-72.09	-72.48	-72.51	-72.73	-72.78	-68.66	-72.32	---	---	---	---
8	-72.08	-72.11	-72.51	-72.57	-72.78	-72.83	-68.61	-69.38	---	---	---	---
9	-72.10	-72.17	-72.53	-72.57	-72.76	-72.81	-69.38	-70.63	---	---	---	---
10	-72.17	-72.21	-72.52	-72.53	-72.06	-72.76	-70.63	-71.30	---	---	---	---
11	-72.21	-72.30	-72.53	-72.56	-72.16	-72.34	-70.67	-71.46	---	---	---	---
12	-72.26	-72.31	-72.56	-72.58	-72.34	-72.59	-68.69	-70.67	---	---	---	---
13	-72.09	-72.26	-72.58	-72.60	-72.59	-72.66	-67.09	-68.69	---	---	---	---
14	-72.09	-72.19	-72.60	-72.62	-72.65	-72.69	-65.81	-67.09	---	---	---	---
15	-72.19	-72.30	-72.60	-72.65	-72.69	-72.75	-64.88	-65.81	---	---	---	---
16	-72.30	-72.39	-72.60	-72.65	-72.75	-72.77	-64.14	-64.88	---	---	---	---
17	-72.22	-72.35	-72.63	-72.66	-65.91	-72.77	-63.53	-64.14	---	---	---	---
18	-72.25	-72.27	-72.63	-72.66	-58.30	-65.91	-62.94	-63.53	---	---	---	---
19	-72.18	-72.27	-72.57	-72.66	-60.69	-65.08	-61.49	-62.94	---	---	---	---
20	-72.21	-72.27	-72.56	-72.63	-65.08	-66.09	-61.23	-61.49	---	---	---	---
21	-72.24	-72.27	-72.18	-72.56	-65.48	-66.38	-61.05	-61.23	---	---	---	---
22	-72.25	-72.30	-72.16	-72.28	-66.38	-68.14	-60.84	-61.05	---	---	---	---
23	-72.29	-72.31	-70.62	-72.32	-66.67	-68.52	---	---	---	---	---	---
24	-72.31	-72.37	-70.88	-71.20	-67.40	-68.85	---	---	---	---	---	---
25	-72.37	-72.39	-71.20	-71.70	-68.85	-69.75	---	---	---	---	---	---
26	-72.30	-72.37	-71.70	-71.97	-69.75	-70.45	---	---	---	---	---	---
27	-72.27	-72.36	-71.97	-72.17	-70.45	-70.87	---	---	---	---	---	---
28	-72.36	-72.49	-72.17	-72.37	-70.87	-71.18	---	---	---	---	---	---
29	-72.49	-72.53	-72.37	-72.55	-71.18	-71.45	---	---	---	---	---	---
30	-72.49	-72.52	-72.55	-72.57	-71.45	-71.63	---	---	---	---	---	---
31	---	---	-72.47	-72.56	---	---	---	---	---	---	---	---
MONTH	-71.86	-72.53	-70.62	-72.66	-58.30	-72.83	-60.84	-72.32	---	---	---	---
YEAR	-58.30	-72.83										

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 102. SITE ID.--391032076385904. PERMIT NUMBER.--AA-81-2641.

LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Aviation Blvd., 0.5 mi north of Dorsey Road intersection. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well (semi-confined), depth 95 ft; casing diameter 6 in., to 85 ft; screen diameter 6 in., from 85 to 95 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1983 to October 1990.

DATUM.--Elevation of land surface is 76.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 5.27 ft above land surface.

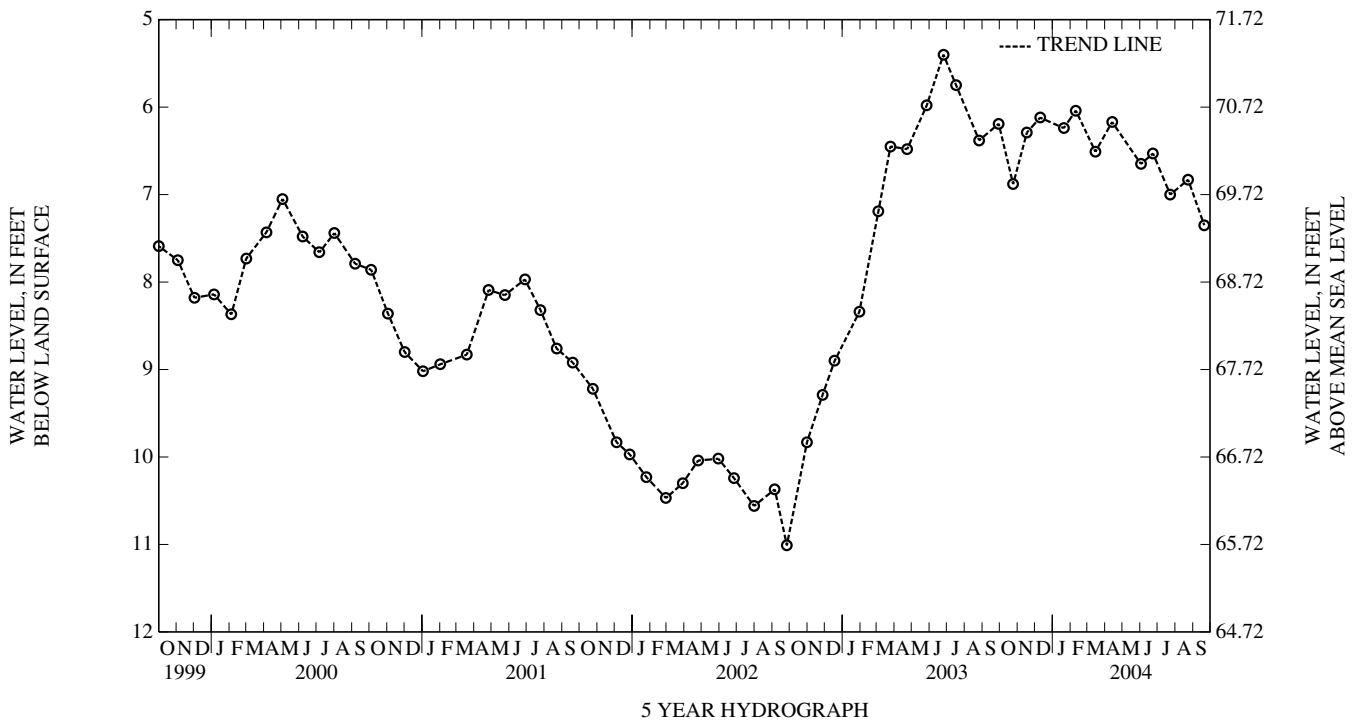
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--December 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.75 ft below land surface, April 3, 1998; lowest measured, 14.36 ft below land surface, November 3, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	6.88	JAN 20, 2004	6.24	APR 13, 2004	6.17	JUL 23, 2004	7.00
NOV 17	6.29	FEB 10	6.04	JUN 02	6.65	AUG 23	6.83
DEC 10	6.12	MAR 15	6.51	23	6.53	SEP 20	7.35
HIGHEST 6.04 FEB 10, 2004							
LOWEST 7.35 SEP 20, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 108. SITE ID.--391032076385906. PERMIT NUMBER.--AA-81-3475.

LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Aviation Blvd., 0.5 mi north of Dorsey Road intersection. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 11 ft; casing diameter 4 in., to 6 ft and casing diameter 6 in., to 3 ft; screen diameter 4 in., from 6 to 11 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1986 to September 1990.

DATUM.--Elevation of land surface is 78.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 5.50 ft above land surface.

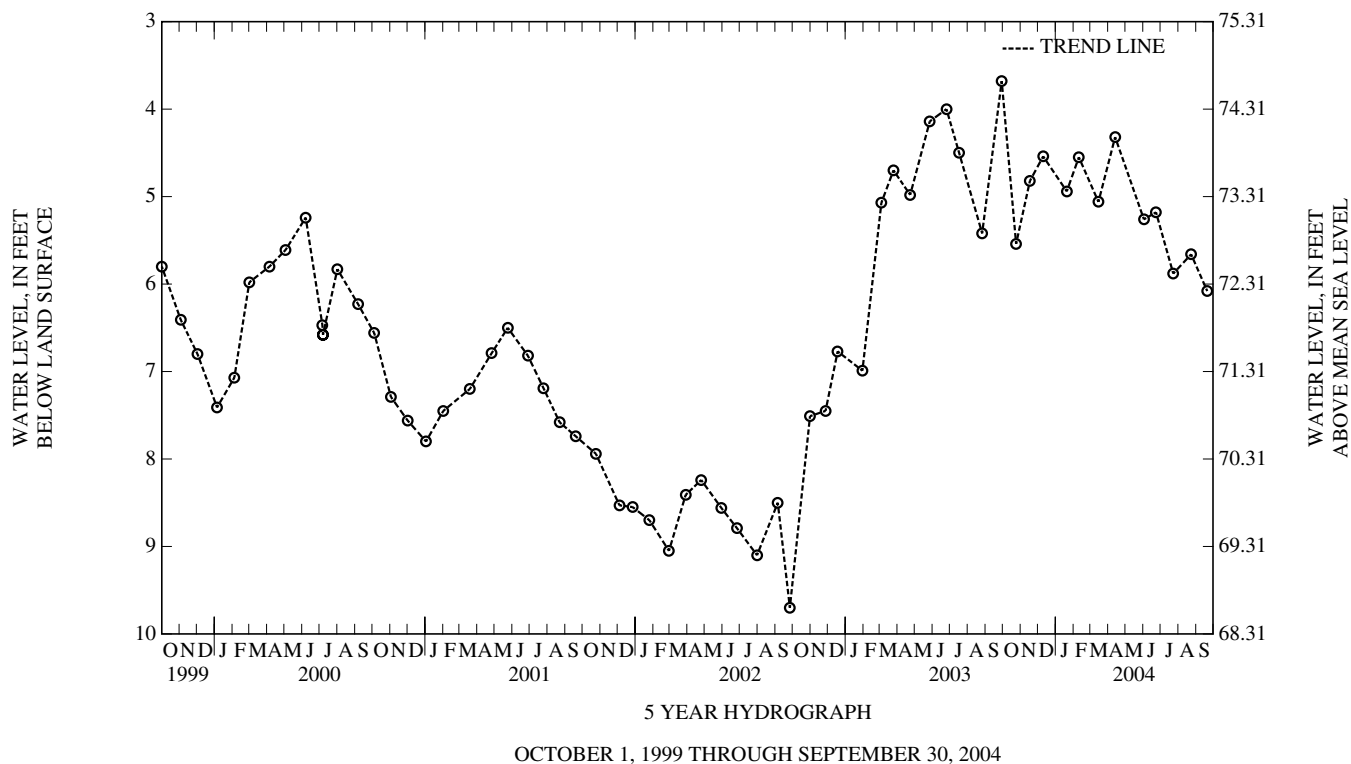
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--August 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.68 ft below land surface, September 29, 2003; lowest measured, Dry on August 22, 1985; January 17, 1986; May 20, 1986; July 8, 1986 and November 3, 1986 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	5.54	JAN 20, 2004	4.94	APR 13, 2004	4.32	JUL 23, 2004	5.88
NOV 17	4.82	FEB 10	4.55	JUN 02	5.26	AUG 23	5.66
DEC 10	4.54	MAR 15	5.06	23	5.18	SEP 20	6.08
HIGHEST	4.32	APR 13, 2004					
LOWEST	6.08	SEP 20, 2004					



ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 109. SITE ID.--391006076380101. PERMIT NUMBER.--AA-81-4890.

LOCATION.--Lat 39°10'06", long 76°38'01", Hydrologic Unit 02060003, 0.05 mi south of Dorsey Road, 0.17 mi west of MD Rt. 648, near Robert Pascal Senior Center. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 46 ft; casing diameter 4 in., to 36 ft; screen diameter 4 in., from 36 to 46 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1985 to July 1998, and 30-minute recorder interval from July 1998 to current year.

DATUM.--Elevation of land surface is 35.78 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 7.10 ft above land surface. On August 1, 1996, 1.15 ft of casing was added. The new measuring point height was 5.44 ft. This extended casing was later removed on March 24, 1997. On January 5, 2000 an extension pipe was added to the casing. The new measuring point height is 7.10 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels before February 23, 1986 are not currently available. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--October 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, (See Measuring point) 39.17 ft above sea level (flowing, recorder), flowing on numerous days (see hydrograph); with added casing highest level measured, 41.35 ft above sea level July 3, 2003 (recorder); lowest measured, 20.20 ft above sea level, October 15, 1987 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

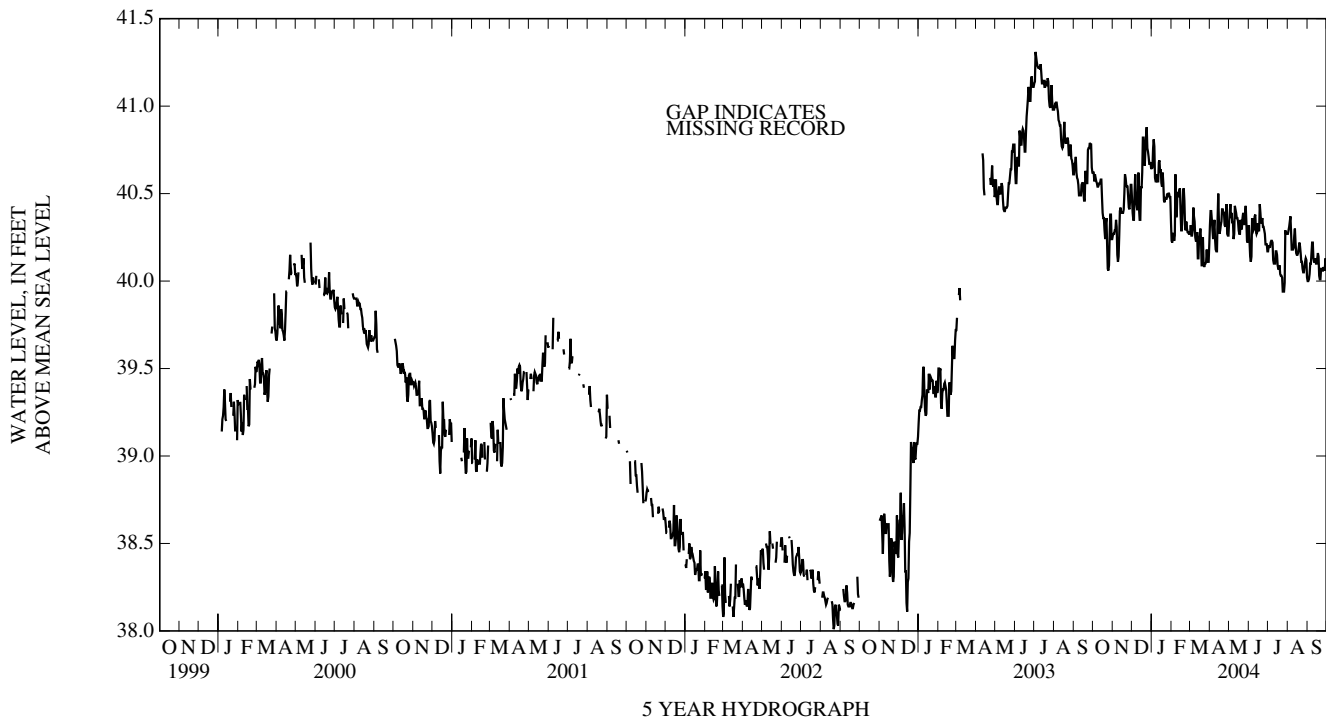
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	40.09	JAN 20, 2004	40.47	APR 13, 2004	40.43	JUL 23, 2004	40.06
NOV 17	40.41	FEB 10	40.57	JUN 02	40.24	SEP 20	40.01
DEC 10	40.48	MAR 15	40.27	23	40.30		
LOWEST	40.01	SEP 20, 2004					
HIGHEST	40.57	FEB 10, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	40.67	40.62	40.27	40.26	40.61	40.47	40.70	40.65	40.34	40.23	40.32	40.27
2	40.69	40.62	40.27	40.27	40.47	40.39	40.76	40.65	40.27	40.22	40.39	40.32
3	40.62	40.57	40.30	40.27	40.39	40.35	40.81	40.76	40.58	40.27	40.34	40.26
4	40.64	40.61	40.30	40.29	40.51	40.35	40.81	40.81	40.52	40.27	40.30	40.26
5	40.64	40.59	40.35	40.29	40.71	40.51	40.81	40.77	40.27	40.23	40.44	40.29
6	40.59	40.57	40.37	40.35	40.71	40.61	40.77	40.59	40.79	40.26	40.58	40.42
7	40.57	40.56	40.37	40.31	40.61	40.50	40.59	40.57	40.82	40.61	40.46	40.37
8	40.56	40.54	40.31	40.15	40.50	40.44	40.61	40.57	40.61	40.37	40.46	40.34
9	40.55	40.54	40.15	40.11	40.44	40.41	40.63	40.61	40.51	40.37	40.34	40.25
10	40.56	40.55	40.26	40.14	40.71	40.41	40.63	40.57	40.62	40.51	40.25	40.23
11	40.56	40.56	40.40	40.26	40.91	40.62	40.68	40.57	40.62	40.49	40.38	40.23
12	40.66	40.56	40.58	40.40	40.62	40.41	40.75	40.68	40.52	40.48	40.40	40.28
13	40.66	40.58	40.62	40.42	40.41	40.35	40.74	40.69	40.53	40.52	40.28	40.13
14	40.90	40.58	40.42	40.39	40.79	40.35	40.79	40.62	40.55	40.53	40.29	40.13
15	40.90	40.48	40.39	40.39	40.79	40.54	40.83	40.64	40.55	40.40	40.30	40.25
16	40.48	40.39	40.39	40.39	40.62	40.53	40.64	40.56	40.40	40.29	40.43	40.26
17	40.39	40.36	40.42	40.39	40.85	40.62	40.62	40.54	40.39	40.29	40.43	40.30
18	40.36	40.36	40.50	40.41	40.85	40.82	40.85	40.62	40.52	40.39	40.30	40.24
19	40.36	40.29	40.84	40.50	40.82	40.82	40.76	40.56	40.56	40.52	40.30	40.09
20	40.33	40.24	40.84	40.61	40.82	40.69	40.56	40.46	40.66	40.53	40.43	40.09
21	40.51	40.33	40.61	40.59	40.76	40.66	40.48	40.45	40.67	40.46	40.45	40.25
22	40.49	40.36	40.59	40.55	40.83	40.76	40.64	40.48	40.46	40.32	40.25	40.11
23	40.36	40.21	40.55	40.54	40.88	40.83	40.57	40.47	40.34	40.29	40.12	40.08
24	40.21	40.07	40.70	40.54	41.00	40.88	40.54	40.47	40.41	40.34	40.12	40.10
25	40.09	40.06	40.62	40.48	40.90	40.76	40.50	40.50	40.41	40.30	40.11	40.10
26	40.27	40.09	40.48	40.42	40.76	40.74	40.50	40.49	40.30	40.28	40.18	40.11
27	40.52	40.27	40.46	40.41	40.74	40.71	40.64	40.50	40.28	40.28	40.23	40.18
28	40.47	40.38	40.82	40.46	40.71	40.67	40.64	40.50	40.28	40.27	40.23	40.11
29	40.54	40.38	40.82	40.55	40.83	40.67	40.50	40.48	40.27	40.27	40.11	40.11
30	40.39	40.24	40.59	40.55	40.89	40.68	40.49	40.48	---	---	40.21	40.11
31	40.26	40.24	---	---	40.70	40.64	40.49	40.34	---	---	40.32	40.21
MONTH	40.90	40.06	40.84	40.11	41.00	40.35	40.85	40.34	40.82	40.22	40.58	40.08

ANNE ARUNDEL COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER						
1	40.53	40.32	40.39	40.34	40.41	40.32	40.20	40.17	40.29	40.27	40.02	40.00
2	40.48	40.40	40.49	40.39	40.32	40.22	40.22	40.20	40.31	40.29	40.01	40.00
3	40.40	40.40	40.49	40.44	40.22	40.14	40.22	40.20	40.35	40.31	40.04	40.01
4	40.45	40.35	40.44	40.36	40.14	40.11	40.22	40.19	40.41	40.34	40.10	40.04
5	40.35	40.29	40.44	40.39	40.42	40.14	40.23	40.22	40.41	40.37	40.10	40.10
6	40.30	40.24	40.42	40.33	40.42	40.36	40.23	40.23	40.37	40.28	40.16	40.10
7	40.39	40.30	40.36	40.34	40.36	40.31	40.35	40.23	40.28	40.18	40.22	40.16
8	40.38	40.35	40.36	40.24	40.31	40.29	40.33	40.22	40.18	40.18	40.30	40.22
9	40.35	40.24	40.43	40.27	40.37	40.30	40.22	40.12	40.19	40.18	40.33	40.22
10	40.24	40.18	40.49	40.43	40.39	40.37	40.12	40.10	40.26	40.19	40.22	40.13
11	40.19	40.17	40.47	40.41	40.39	40.38	40.10	40.10	40.30	40.26	40.13	40.11
12	40.36	40.17	40.41	40.39	40.38	40.29	40.17	40.10	40.31	40.30	40.13	40.11
13	40.54	40.36	40.39	40.36	40.29	40.27	40.17	40.17	40.32	40.22	40.13	40.13
14	40.54	40.50	40.36	40.36	40.35	40.28	40.28	40.17	40.22	40.16	40.13	40.10
15	40.50	40.35	40.36	40.34	40.35	40.33	40.27	40.15	40.16	40.15	40.13	40.10
16	40.35	40.27	40.34	40.29	40.33	40.29	40.15	40.09	40.16	40.15	40.16	40.13
17	40.36	40.29	40.29	40.27	40.54	40.29	40.09	40.07	40.19	40.16	40.32	40.16
18	40.36	40.32	40.36	40.27	40.47	40.44	40.14	40.07	40.22	40.19	40.41	40.14
19	40.45	40.34	40.36	40.35	40.44	40.39	40.14	40.09	40.22	40.22	40.14	40.03
20	40.45	40.41	40.35	40.30	40.39	40.33	40.09	40.04	40.22	40.20	40.03	40.01
21	40.43	40.41	40.36	40.30	40.36	40.34	40.04	40.03	40.24	40.16	40.08	40.01
22	40.43	40.39	40.39	40.36	40.39	40.36	40.06	40.03	40.16	40.11	40.08	40.07
23	40.42	40.39	40.39	40.39	40.39	40.31	40.06	40.02	40.11	40.11	40.08	40.07
24	40.40	40.32	40.39	40.37	40.31	40.31	40.02	39.94	40.11	40.07	40.07	40.06
25	40.35	40.31	40.39	40.32	40.31	40.29	39.94	39.94	40.07	40.05	40.08	40.06
26	40.47	40.35	40.46	40.39	40.33	40.27	39.99	39.94	40.08	40.05	40.08	40.08
27	40.49	40.44	40.46	40.43	40.27	40.21	40.48	39.99	40.11	40.08	40.08	40.06
28	40.44	40.27	40.43	40.34	40.25	40.21	40.51	40.29	40.15	40.11	40.40	40.08
29	40.27	40.26	40.34	40.23	40.25	40.21	40.33	40.27	40.15	40.13	40.37	40.13
30	40.34	40.26	40.26	40.22	40.21	40.17	40.27	40.27	40.13	40.12	40.13	40.06
31	---	---	40.41	40.26	---	---	40.27	40.27	40.13	40.02	---	---
MONTH	40.54	40.17	40.49	40.22	40.54	40.11	40.51	39.94	40.41	40.02	40.41	40.00
YEAR	41.00	39.94										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 110. SITE ID.--391032076385907. PERMIT NUMBER.--AA-88-8878.

LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Aviation Blvd. 0.5 mi of Dorsey Road intersection. Owner: Maryland State Highway Administration.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 28 ft; casing diameter 4 in., to 18 ft; screen diameter 4 in., from 18 to 28 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 77.42 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 5.03 ft. above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

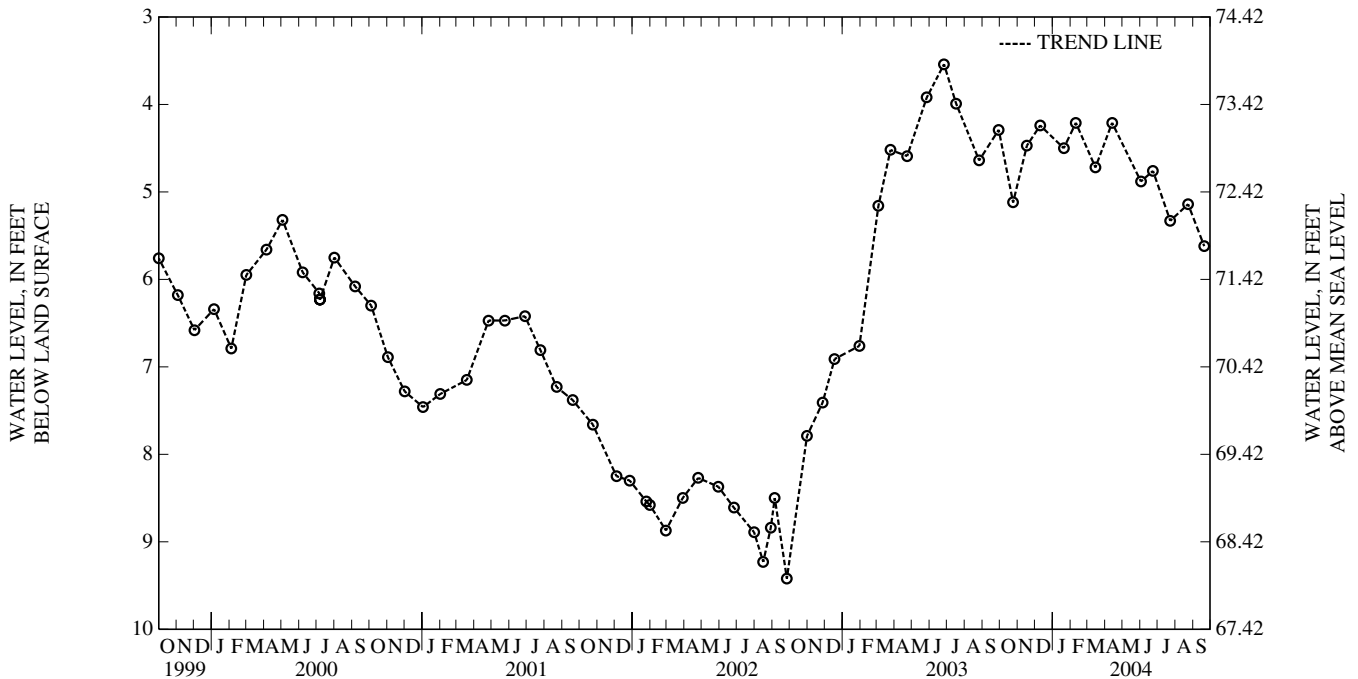
PERIOD OF RECORD.--December 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.29 ft below land surface, April 3, 1998; lowest measured, 9.89 ft below land surface, December 3, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	5.12	JAN 20, 2004	4.50	APR 13, 2004	4.21	JUL 23, 2004	5.33
NOV 17	4.47	FEB 10	4.21	JUN 02	4.88	AUG 23	5.14
DEC 10	4.24	MAR 15	4.72	23	4.76	SEP 20	5.62

HIGHEST 4.21 FEB 10, 2004 APR 13, 2004
 LOWEST 5.62 SEP 20, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 91. SITE ID.--390950076391101. PERMIT NUMBER.--AA-04-2029.

LOCATION.--Lat 39°09'50", long 76°39'11", Hydrologic Unit 02060003, 0.3 mi southeast of the intersection of Dorsey Road and Baltimore Annapolis Blvd., in the median of MD Rt. 176, Glen Burnie. Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, artesian (semi-confined), observation well, depth 160 ft; casing diameter 6 in., to 119 ft; casing diameter 4 in., from 119 to 155 ft; screen diameter 2 in., from 155 to 160 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital recorder from April 1981 to March 1986.

DATUM.--Elevation of land surface is 82.63 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.25 ft above land surface.

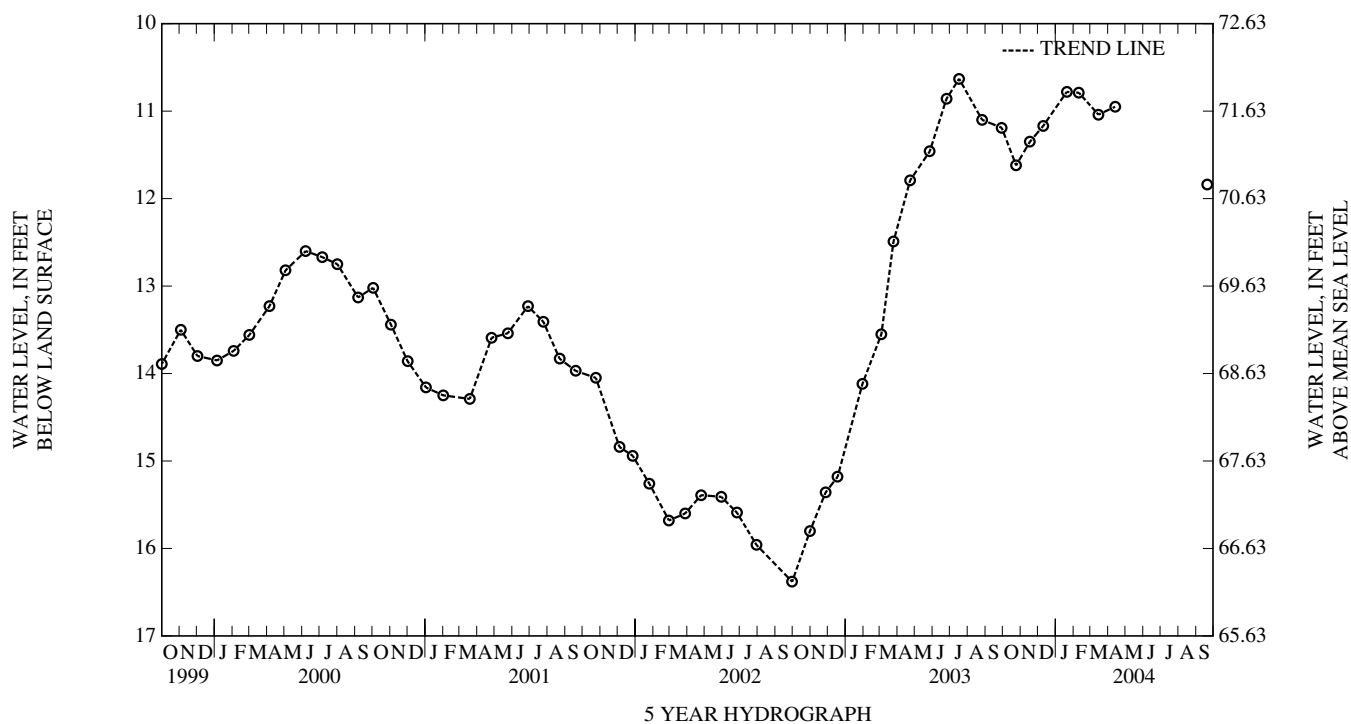
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels were affected by local ground-water withdrawal up to May 1995; when the nearby pumping station discontinued ground-water withdrawal from the Patapsco aquifer.

PERIOD OF RECORD.--March 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.60 ft below land surface, May 7, 1998; lowest measured, 75.20 ft below land surface, September 1, 1982.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	11.62	DEC 10, 2003	11.17	FEB 10, 2004	10.79	APR 13, 2004	10.95
NOV 17	11.35	JAN 20, 2004	10.78	MAR 15	11.04	SEP 20	11.84
HIGHEST 10.78		JAN 20, 2004					
LOWEST 11.84		SEP 20, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 152. SITE ID.--390821076365401. PERMIT NUMBER.--AA-81-3463.

LOCATION.--Lat 39°08'21", long 76°36'54", Hydrologic Unit 02060003, 100 ft north of MD Rt. 100, 0.2 mi southeast of the intersection of Oakwood Road and Funke Road, at Woodside Elementary School. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 103 ft; casing diameter 6 in., to 90 ft; and casing diameter 4 in., from 100 to 103 ft; screen diameter 4 in., from 90 to 100 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from March 1985 to December 1996, and 30-minute recorder interval from December 1996 to current year.

DATUM.--Elevation of land surface is 53.29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 3.00 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels before February 23, 1986 are currently not available. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.97 ft above sea level, April 20, 2004 (recorder); lowest measured, 19.88 ft above sea level, August 21, 1987 (recorder).

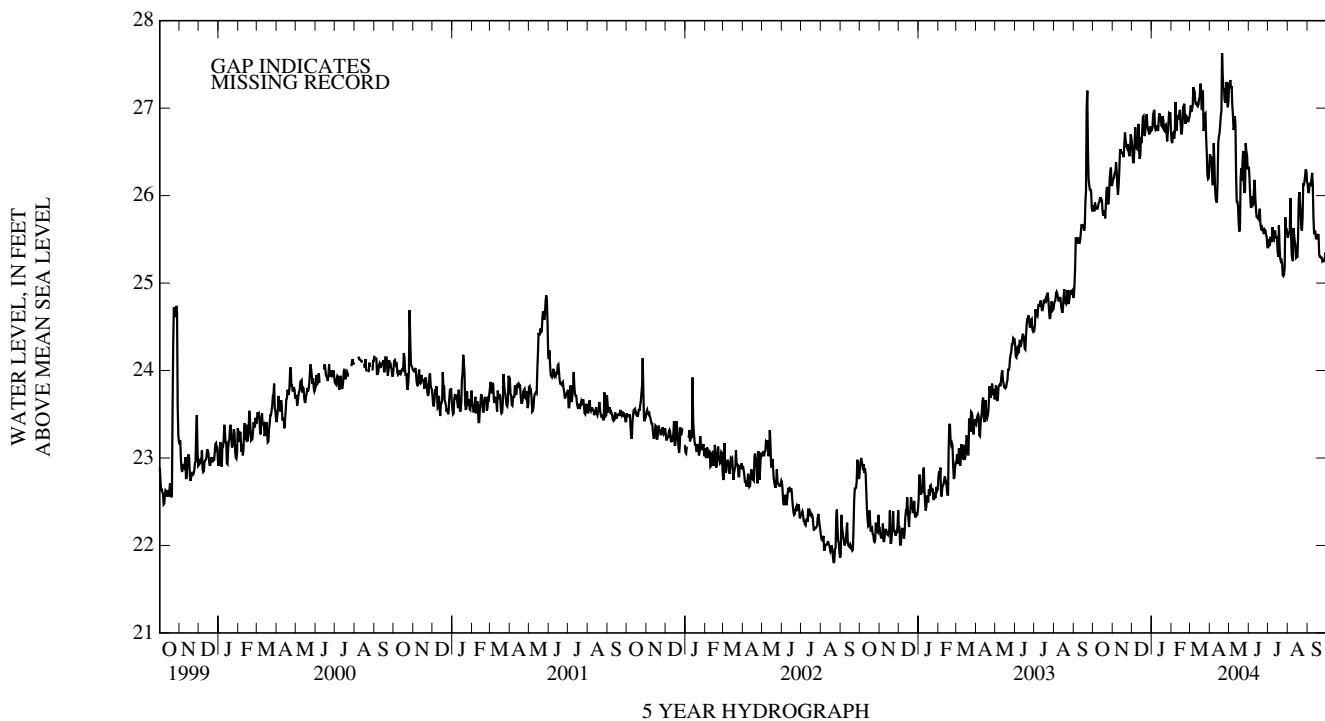
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL				
	OCT 24, 2003	26.01	JAN 20, 2004	26.79	APR 13, 2004	26.43	JUL 13, 2004	25.55				
	NOV 17	26.48	FEB 10	26.97	JUN 02	26.52	SEP 20	25.34				
	DEC 10	26.61	MAR 15	27.11	23	25.78						
	LOWEST	25.34	SEP 20, 2004									
	HIGHEST	27.11	MAR 15, 2004									
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25.93	25.86	26.22	26.17	26.76	26.59	26.83	26.75	26.74	26.62	27.03	26.95
2	25.94	25.89	26.23	26.19	26.59	26.45	26.92	26.78	26.71	26.60	27.11	27.03
3	25.92	25.82	26.29	26.22	26.45	26.37	27.00	26.92	27.01	26.71	27.05	26.96
4	25.99	25.92	26.32	26.26	26.59	26.42	27.03	26.96	26.98	26.72	27.06	26.99
5	25.93	25.88	26.44	26.26	26.87	26.59	27.05	26.98	26.72	26.65	27.24	27.03
6	25.92	25.86	26.45	26.38	26.88	26.78	26.98	26.78	27.28	26.72	27.48	27.24
7	25.90	25.85	26.46	26.28	26.78	26.66	26.79	26.75	27.32	27.07	27.32	27.17
8	25.90	25.85	26.28	26.11	26.66	26.54	26.82	26.76	27.07	26.75	27.33	27.18
9	25.92	25.88	26.11	26.01	26.55	26.53	26.86	26.80	26.92	26.75	27.18	27.08
10	25.94	25.92	26.26	26.11	26.92	26.55	26.80	26.75	27.04	26.92	27.08	27.04
11	25.98	25.93	26.48	26.26	27.10	26.82	26.89	26.75	27.04	26.90	27.17	27.07
12	26.08	25.98	26.70	26.48	26.82	26.52	27.01	26.89	26.96	26.87	27.26	27.03
13	26.04	25.95	26.78	26.53	26.52	26.42	27.00	26.94	26.98	26.94	27.06	27.02
14	26.37	25.96	26.53	26.49	26.94	26.46	27.05	26.85	27.03	26.98	27.15	27.04
15	26.40	25.94	26.51	26.49	26.94	26.67	27.09	26.91	27.03	26.84	27.16	27.11
16	25.94	25.81	26.51	26.49	26.75	26.60	26.91	26.80	26.84	26.71	27.43	27.12
17	25.82	25.77	26.51	26.46	27.00	26.75	26.91	26.79	26.82	26.71	27.43	27.28
18	25.86	25.82	26.60	26.44	26.96	26.90	27.15	26.91	27.01	26.82	27.28	27.23
19	25.89	25.82	27.00	26.60	26.94	26.91	27.07	26.86	27.08	27.01	27.30	26.99
20	25.88	25.74	27.00	26.72	26.91	26.74	26.86	26.75	27.21	27.03	27.33	26.99
21	26.13	25.88	26.72	26.64	26.76	26.68	26.80	26.74	27.26	27.05	27.38	27.20
22	26.14	26.06	26.65	26.57	26.86	26.76	27.00	26.80	27.05	26.85	27.20	26.74
23	26.17	26.10	26.59	26.55	26.94	26.86	26.91	26.81	26.91	26.82	26.95	26.77
24	26.10	25.92	26.80	26.59	27.08	26.93	26.91	26.75	27.02	26.91	26.98	26.93
25	25.98	25.90	26.73	26.53	26.98	26.81	26.75	26.62	26.99	26.90	26.98	26.94
26	26.19	25.98	26.53	26.49	26.81	26.76	26.82	26.71	26.90	26.84	27.00	26.67
27	26.48	26.19	26.53	26.45	26.77	26.73	27.06	26.82	26.92	26.89	26.74	26.49
28	26.41	26.27	26.97	26.53	26.75	26.70	27.06	26.94	26.91	26.87	26.49	26.23
29	26.50	26.32	26.97	26.70	26.94	26.75	26.95	26.93	26.95	26.90	26.34	26.19
30	26.32	26.12	26.74	26.66	27.01	26.79	27.00	26.95	---	---	26.43	26.20
31	26.17	26.12	---	---	26.82	26.74	26.95	26.74	---	---	26.54	26.32
MONTH	26.50	25.74	27.00	26.01	27.10	26.37	27.15	26.62	27.32	26.60	27.48	26.19

ANNE ARUNDEL COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	26.74	26.47	27.34	27.28	26.76	26.33	25.54	25.41	25.57	25.52	26.18	26.13
2	26.62	26.44	27.41	27.29	26.55	26.18	25.54	25.50	25.57	25.56	26.13	26.04
3	26.53	26.44	27.37	27.32	26.38	26.00	25.50	25.43	25.62	25.57	26.16	26.04
4	26.54	26.31	27.33	27.22	26.02	25.87	25.56	25.44	26.03	25.61	26.16	26.13
5	26.31	26.13	27.33	27.25	26.36	25.87	25.67	25.53	26.44	25.97	26.18	26.14
6	26.68	26.13	27.27	27.03	26.24	25.99	25.55	25.48	25.97	25.54	26.19	26.13
7	26.91	26.60	27.03	26.92	26.01	25.88	25.84	25.48	25.54	25.32	26.27	26.19
8	26.60	26.37	26.92	26.75	26.24	25.90	25.87	25.64	25.37	25.28	26.39	26.26
9	26.37	26.08	26.91	26.78	26.28	26.08	25.71	25.50	25.63	25.25	26.51	26.13
10	26.08	25.97	26.95	26.91	26.52	26.18	25.82	25.49	25.92	25.63	26.13	25.76
11	26.01	25.93	26.92	26.79	26.22	25.98	25.79	25.56	25.68	25.53	25.76	25.57
12	26.17	25.93	26.81	26.22	25.99	25.85	25.84	25.60	25.53	25.47	25.66	25.57
13	26.61	26.17	26.22	25.93	25.85	25.76	25.68	25.52	25.62	25.42	25.68	25.58
14	26.79	26.60	26.04	25.93	25.95	25.76	25.66	25.52	25.42	25.29	25.64	25.51
15	26.81	26.68	26.03	25.88	25.86	25.74	25.67	25.52	25.44	25.30	25.63	25.51
16	26.81	26.71	25.88	25.69	25.84	25.73	25.54	25.36	25.62	25.30	25.63	25.55
17	26.93	26.81	25.69	25.59	25.91	25.78	25.70	25.30	26.03	25.54	25.73	25.55
18	26.97	26.91	26.19	25.62	25.98	25.85	25.95	25.66	26.16	25.95	25.95	25.55
19	27.63	26.97	26.91	26.19	25.85	25.67	25.66	25.42	26.86	26.04	25.55	25.33
20	27.97	27.63	26.78	26.31	25.73	25.63	25.42	25.28	26.65	25.91	25.33	25.30
21	27.71	27.38	26.39	26.17	25.64	25.60	25.28	25.25	26.07	25.80	25.34	25.30
22	27.38	27.23	27.30	26.39	25.83	25.63	25.28	25.26	25.83	25.63	25.33	25.29
23	27.25	27.22	26.97	26.51	25.81	25.61	25.28	25.22	25.74	25.60	25.32	25.29
24	27.23	27.09	26.51	26.15	25.70	25.57	25.22	25.09	26.40	25.74	25.29	25.25
25	27.15	27.06	26.15	26.03	25.72	25.57	25.11	25.08	26.23	26.14	25.31	25.26
26	27.35	27.15	26.66	26.06	25.87	25.61	25.18	25.10	26.18	26.11	25.31	25.25
27	27.40	27.30	26.74	26.60	25.84	25.60	25.85	25.18	26.26	26.16	25.30	25.25
28	27.30	27.07	26.70	26.50	25.63	25.55	26.00	25.75	26.37	26.23	25.66	25.30
29	27.08	27.01	26.71	26.47	25.58	25.52	25.84	25.62	26.42	26.30	25.66	25.35
30	27.34	27.08	26.68	26.31	25.52	25.41	25.84	25.62	26.34	26.28	25.35	25.26
31	---	---	26.90	26.31	---	---	25.65	25.57	26.30	26.16	---	---
MONTH	27.97	25.93	27.41	25.59	26.76	25.41	26.00	25.08	26.86	25.25	26.51	25.25
YEAR	27.97	25.08										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 155. SITE ID.--390938076383701. PERMIT NUMBER.--AA-81-3460.

LOCATION.--Lat 39°09'38", long 76°38'37", Hydrologic Unit 02060003, 200 ft off MD Rt. 3, 0.4 mi south of MD Rt. 176 intersection, off Stewart Avenue near bike trail. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 159 ft; casing diameter 6 in., to 145 ft. screen diameter 4 in., from 145 to 155 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1984 to June 1998, and 30-minute recorder interval June 1998 to current year.

DATUM.--Elevation of land surface is 57.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.50 ft above land surface.

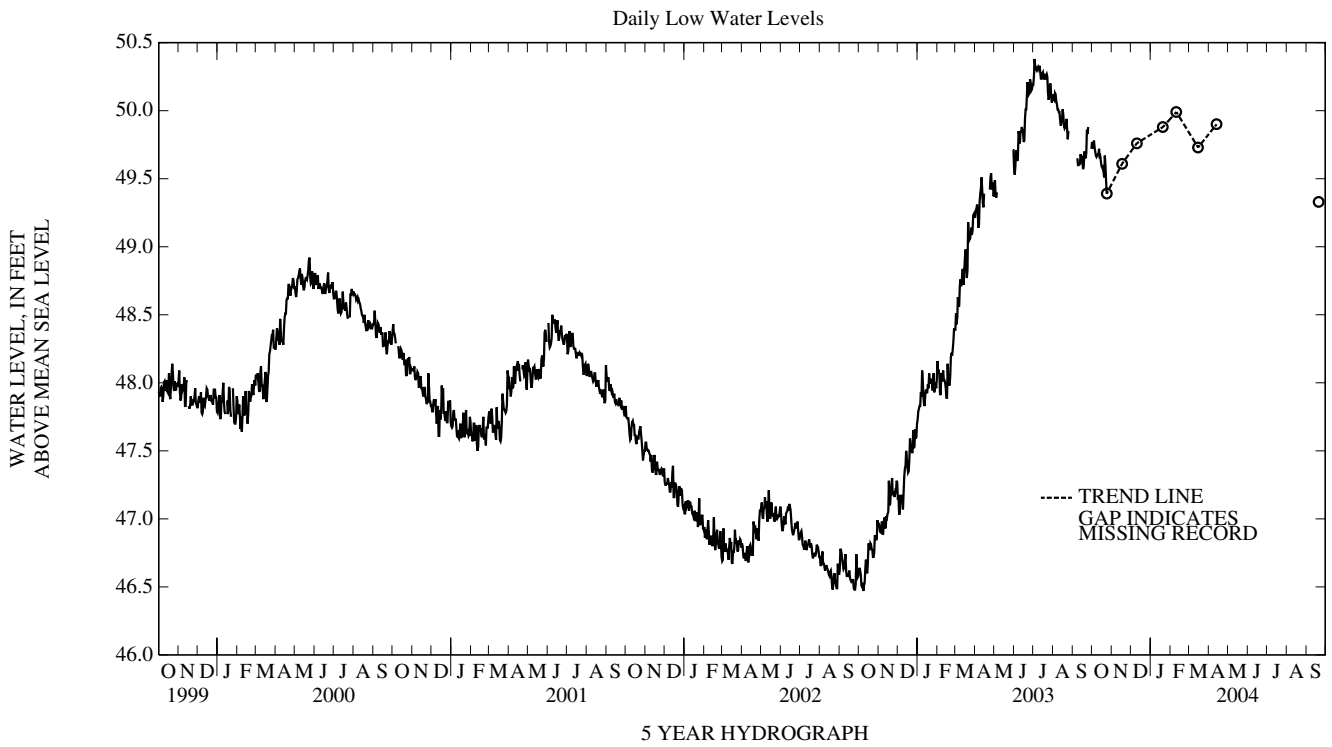
REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--October 1984 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.45 ft above sea level, July 11, 2003 (recorder); lowest measured, 32.39 ft above sea level, November 3, 1986.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	49.39	DEC 10, 2003	49.76	FEB 10, 2004	49.99	APR 13, 2004	49.90
NOV 17	49.61	JAN 20, 2004	49.88	MAR 15	49.73	SEP 20	49.33
LOWEST 49.33 SEP 20, 2004							
HIGHEST 49.99 FEB 10, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 156. SITE ID.--390922076371001. PERMIT NUMBER.--AA-81-3462.

LOCATION.--Lat 39°09'22", long 76°37'10", Hydrologic Unit 02060003, off Wardour Road, 0.3 mi north of Aquahart Road intersection, next to the Baltimore and Annapolis bike trail. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 173 ft; casing diameter 6 in., to 160 ft; casing diameter 4 in., from 170 to 173 ft; screen diameter 4 in., from 160 to 170 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval from October 1984 to June 1998, and 15-minute recorder interval from June 1998 to current year.

DATUM.--Elevation of land surface is 68.99 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.26 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.70 ft above sea level, September 22, 2003 (recorder); lowest measured, 12.76 ft above sea level, September 14, 1987.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

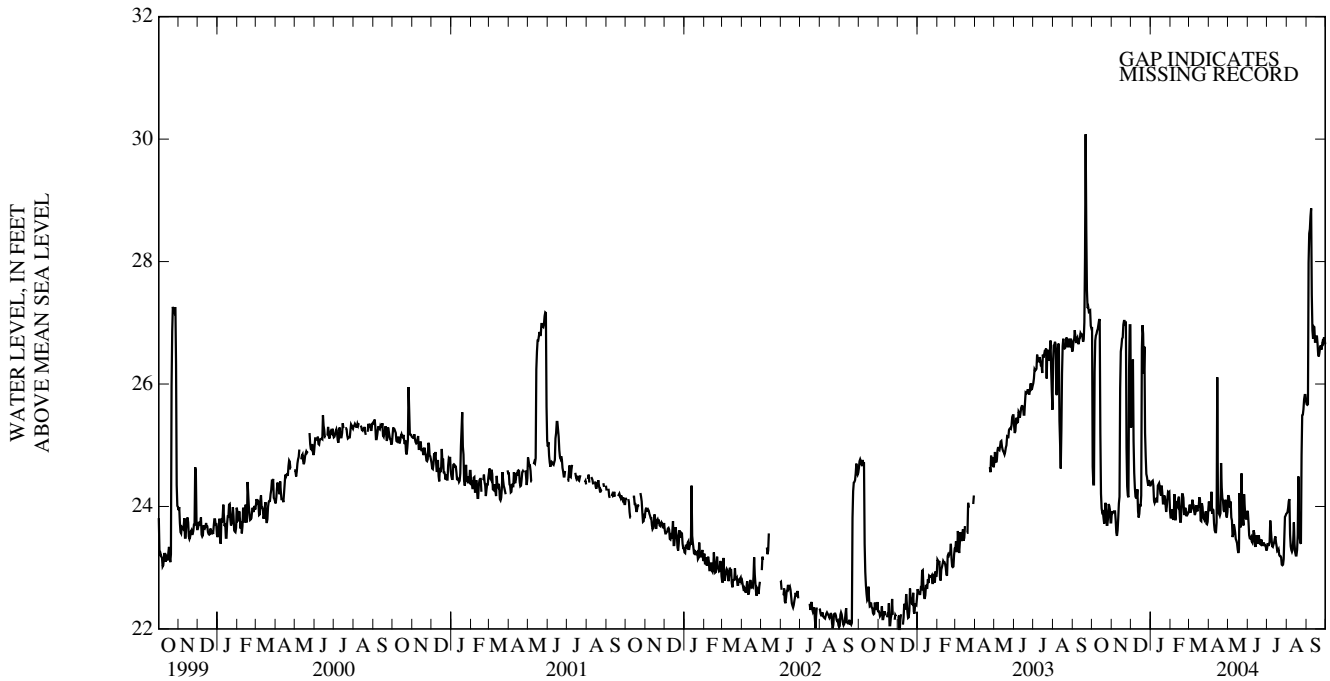
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	23.76	JAN 20, 2004	24.13	APR 13, 2004	23.87	JUL 23, 2004	23.22
NOV 17	26.77	FEB 10	24.22	JUN 02	24.18	SEP 20	26.47
DEC 10	24.25	MAR 15	24.02	23	23.45		
LOWEST	23.22	JUL 23, 2004					
HIGHEST	26.77	NOV 17, 2003					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	27.02	26.93	24.09	23.92	27.17	25.29	24.48	24.36	23.94	23.82	24.06	23.96
2	27.05	24.65	23.92	23.89	26.68	25.40	24.58	24.39	23.95	23.82	24.15	24.03
3	24.65	24.36	23.96	23.90	26.60	25.50	24.46	24.41	24.34	23.95	24.03	23.90
4	26.20	24.36	23.95	23.92	27.03	26.40	24.48	24.42	24.23	23.85	24.03	23.93
5	26.71	26.20	23.97	23.92	27.22	25.07	24.47	24.34	23.88	23.78	24.28	23.97
6	26.82	26.71	23.96	23.92	25.07	24.55	24.34	24.10	24.49	23.88	24.48	24.11
7	26.82	26.79	23.94	23.78	24.55	24.31	24.14	24.06	24.55	24.20	24.23	24.04
8	26.87	26.82	23.78	23.57	24.31	24.16	24.20	24.09	24.20	23.79	24.24	24.02
9	26.93	26.87	23.61	23.52	24.16	24.14	24.23	24.14	24.09	23.79	24.02	23.91
10	26.97	26.90	23.81	23.61	24.59	24.14	24.14	24.08	24.27	24.09	23.91	23.86
11	27.04	26.97	24.05	23.81	24.78	24.28	24.34	24.08	24.27	24.02	24.17	23.90
12	27.18	27.04	24.25	24.05	24.28	23.92	24.46	24.34	24.12	24.00	24.58	24.02
13	27.17	27.06	25.93	24.16	23.92	23.82	26.48	24.36	24.16	24.12	24.33	23.96
14	27.09	25.20	26.53	25.93	24.46	23.88	24.75	24.38	24.20	24.16	24.20	23.92
15	25.20	24.21	26.62	26.53	24.46	24.04	24.66	24.32	24.20	23.92	24.09	24.00
16	24.21	23.97	26.74	26.62	24.18	24.00	24.34	24.21	23.92	23.75	24.56	24.00
17	24.00	23.90	26.77	26.74	26.58	24.18	24.34	24.18	23.96	23.75	24.72	24.15
18	23.98	23.91	26.97	26.76	26.96	26.58	24.70	24.34	24.20	23.96	24.49	24.11
19	23.94	23.81	27.39	26.97	27.09	26.96	24.51	24.22	24.28	24.20	24.30	23.77
20	23.90	23.72	27.37	27.03	27.09	26.82	24.22	24.05	24.48	24.20	24.32	23.76
21	24.18	23.90	27.06	27.03	26.90	26.17	24.18	24.05	24.50	24.14	24.52	24.05
22	24.12	24.06	27.03	26.98	27.13	26.61	24.43	24.18	24.14	23.90	25.14	23.99
23	24.07	23.93	27.06	26.99	27.13	25.20	24.28	24.14	23.98	23.86	23.99	23.82
24	23.93	23.70	27.16	24.96	25.20	24.82	24.28	24.04	24.17	23.98	23.86	23.81
25	23.81	23.70	24.96	24.33	24.82	24.53	24.04	23.91	24.07	23.90	23.84	23.78
26	24.04	23.81	24.33	24.18	24.53	24.48	24.13	23.99	23.91	23.84	23.97	23.81
27	24.26	24.04	26.25	24.15	24.50	24.40	24.47	24.13	23.98	23.91	24.05	23.92
28	24.12	24.01	27.26	26.25	24.43	24.34	24.47	24.24	23.94	23.88	23.92	23.72
29	24.22	23.94	27.26	26.96	24.69	24.43	24.25	24.23	23.96	23.90	23.77	23.71
30	23.94	23.74	27.11	26.96	24.78	24.40	24.35	24.24	---	---	24.02	23.75
31	24.90	23.74	---	---	24.48	24.33	24.26	23.94	---	---	24.08	23.95
MONTH	27.18	23.70	27.39	23.52	27.22	23.82	26.48	23.91	24.55	23.75	25.14	23.71

ANNE ARUNDEL COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	24.27	24.08	24.34	24.17	24.76	23.90	23.41	23.31	23.91	23.89	25.72	25.67
2	24.16	23.94	24.30	24.17	24.50	23.73	23.49	23.40	23.98	23.91	25.68	25.66
3	24.03	23.94	24.22	24.10	24.14	23.53	23.45	23.37	24.36	23.98	27.98	25.67
4	25.14	24.00	24.26	23.98	23.54	23.48	23.42	23.37	26.40	24.09	28.46	27.98
5	26.10	24.24	24.16	24.08	24.06	23.48	25.33	23.42	26.41	24.12	28.53	28.46
6	24.24	23.88	24.10	23.82	23.72	23.50	25.72	23.77	24.12	23.54	28.74	28.53
7	24.09	23.95	24.24	23.77	23.54	23.43	24.21	23.61	23.54	23.35	28.87	28.74
8	24.02	23.94	23.77	23.50	23.57	23.41	23.73	23.47	23.35	23.29	29.05	28.87
9	23.94	23.72	23.71	23.55	23.61	23.50	23.51	23.35	23.29	23.26	29.08	27.46
10	23.72	23.61	25.43	23.71	24.42	23.61	23.63	23.34	23.49	23.29	27.46	26.88
11	23.67	23.58	23.91	23.66	23.77	23.56	23.61	23.38	25.17	23.45	26.94	26.74
12	23.74	23.58	23.71	23.58	23.56	23.38	23.49	23.41	25.64	23.74	27.27	26.94
13	26.11	23.74	23.58	23.47	24.10	23.34	23.63	23.47	23.74	23.39	27.27	26.93
14	26.62	26.11	23.48	23.44	23.60	23.53	23.59	23.51	23.39	23.25	26.93	26.69
15	26.62	24.23	23.48	23.40	23.63	23.46	23.55	23.41	23.25	23.20	26.75	26.69
16	24.23	23.89	23.40	23.30	23.46	23.39	23.49	23.35	23.29	23.20	26.79	26.73
17	23.96	23.88	23.30	23.24	23.61	23.42	23.35	23.27	23.87	23.29	27.02	26.79
18	23.93	23.85	24.65	23.30	23.67	23.53	23.38	23.28	24.84	23.54	27.08	26.66
19	26.41	23.89	26.07	24.22	23.57	23.45	23.37	23.30	26.23	24.49	26.66	26.48
20	26.80	24.71	24.25	23.73	23.45	23.39	23.30	23.21	24.49	23.79	26.51	26.45
21	24.71	24.31	24.54	23.66	23.46	23.38	23.21	23.19	23.79	23.51	26.61	26.51
22	24.31	24.14	26.42	24.54	23.75	23.46	23.26	23.19	23.51	23.41	26.65	26.60
23	24.26	24.10	24.88	24.05	23.56	23.41	23.28	23.17	24.84	23.39	26.65	26.63
24	24.10	23.94	24.19	23.80	23.41	23.37	23.17	23.05	26.03	24.84	26.63	26.56
25	24.03	23.91	24.92	23.69	23.54	23.37	23.05	23.04	25.59	25.49	26.72	26.63
26	24.19	24.03	26.19	24.20	23.61	23.41	23.14	23.05	25.59	25.50	26.72	26.69
27	24.31	24.11	24.72	24.00	23.57	23.37	23.59	23.14	25.77	25.59	26.75	26.67
28	24.11	23.86	24.37	23.83	23.41	23.37	23.94	23.49	25.83	25.75	27.09	26.75
29	23.91	23.82	24.53	23.80	23.43	23.34	23.87	23.83	25.83	25.82	27.03	26.75
30	24.87	23.91	24.31	23.80	23.34	23.28	23.95	23.85	25.87	25.82	26.75	26.65
31	---	---	24.80	23.93	---	---	23.91	23.88	25.87	25.72	---	---
MONTH	26.80	23.58	26.42	23.24	24.76	23.28	25.72	23.04	26.41	23.20	29.08	25.66
YEAR	29.08	23.04										

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 157. SITE ID.--390737076374401. PERMIT NUMBER.--AA-81-3464.

LOCATION.--Lat 39°07'37", long 76°37'44", Hydrologic Unit 02060003, off Nolfield Dr., 0.14 mi east of Phirne Rd., at Rippling Woods Elementary School.
Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 180 ft; casing diameter 6 in., to 167 ft; and casing diameter 4 in., from 177 to 180 ft; screen diameter 4 in., from 167 to 177 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.
Equipped with digital water-level recorder--60-minute recorder interval from March 1985 to December 1996, and 30-minute recorder interval from December 1996 to current year.

DATUM.--Elevation of land surface is 75.75 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.50 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.
Missing data due to recorder malfunction.

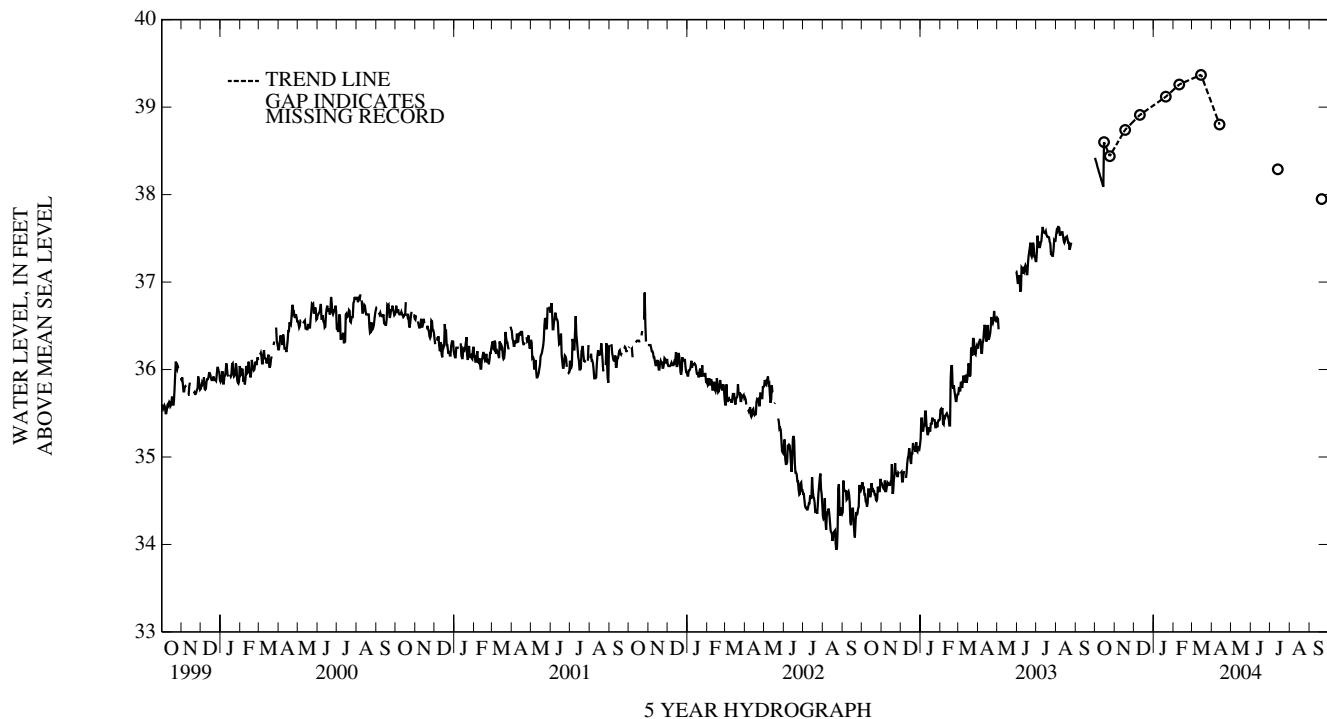
PERIOD OF RECORD.--March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.37 ft above sea level, March 15, 2004; lowest measured, 32.02 ft above sea level, September 4, 1992.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2003	38.60	DEC 10, 2003	38.91	MAR 15, 2004	39.37	SEP 20, 2004	37.95
24	38.44	JAN 20, 2004	39.12	APR 13	38.80		
NOV 17	38.74	FEB 10	39.26	JUL 13	38.29		
	LOWEST 37.95	SEP 20, 2004					
	HIGHEST 39.37	MAR 15, 2004					

Daily Low Water Levels



ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 158. SITE ID.--390744076390001. PERMIT NUMBER.--AA-81-3459.

LOCATION.--Lat 39°07'44", long 76°39'00", Hydrologic Unit 02060003, 0.05 mi off Stevenson Rd., 0.45 mi west of New Cut Road, at Center for Applied Technology-North. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 187 ft; casing diameter 6 in., to 174 ft; screen diameter 4 in., from 174 to 184 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from January 1985 to 1989.

DATUM.--Elevation of land surface is 108.25 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

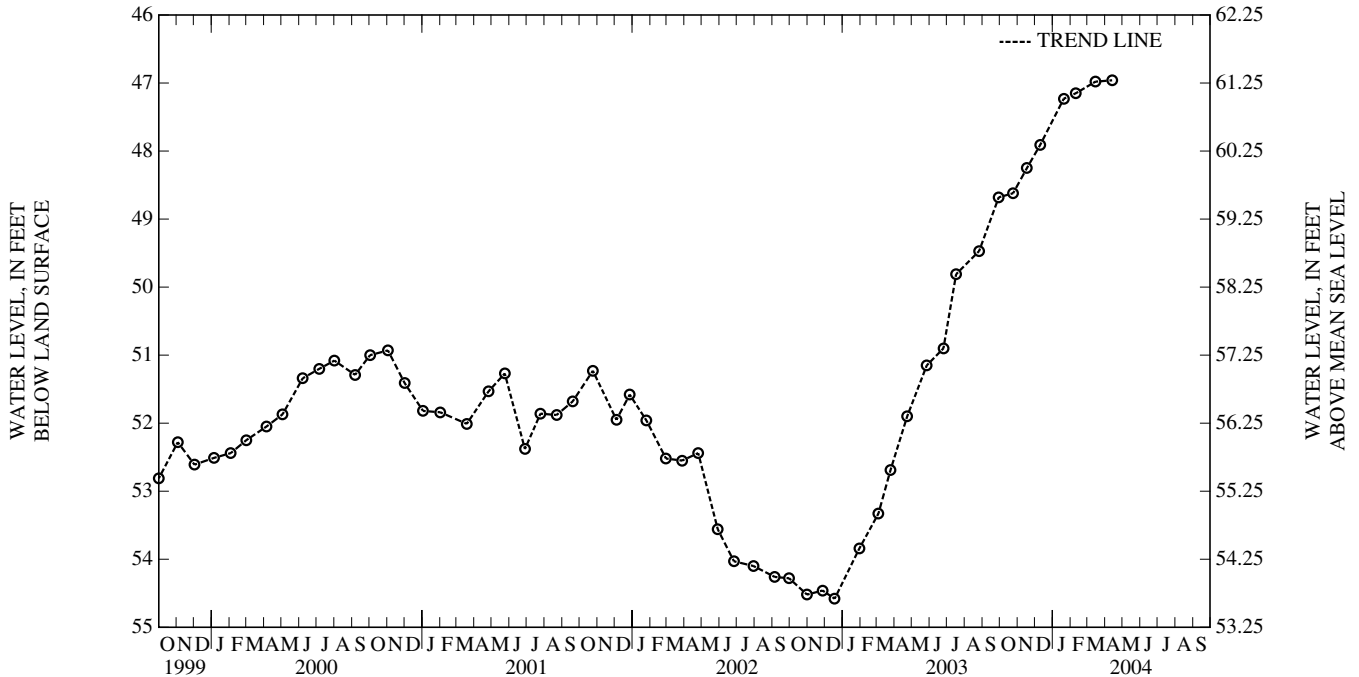
PERIOD OF RECORD.--January 1985 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.96 ft below land surface, April 13, 2004; lowest measured, 55.90 ft below land surface, September 14, 1987 and January 15, 1988.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	48.62	DEC 10, 2003	47.91	FEB 10, 2004	47.15	APR 13, 2004	46.96
NOV 17	48.25	JAN 20, 2004	47.23	MAR 15	46.98		

HIGHEST 46.96 APR 13, 2004
 LOWEST 48.62 OCT 24, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 159. SITE ID.--390737076374402. PERMIT NUMBER.--AA-81-3949.

LOCATION.--Lat 39°07'37", long 76°37'44", Hydrologic Unit 02060003, off Nolfield Dr., 0.14 mi east of Phrine Rd., at Rippling Woods Elementary School.
Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 99 ft; casing diameter 6 in., to 89 ft; screen diameter 4 in., from 89 to 99 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.
Equipped with digital water-level recorder--60-minute recorder interval from March 1985 to July 1989.

DATUM.--Elevation of land surface is 75.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

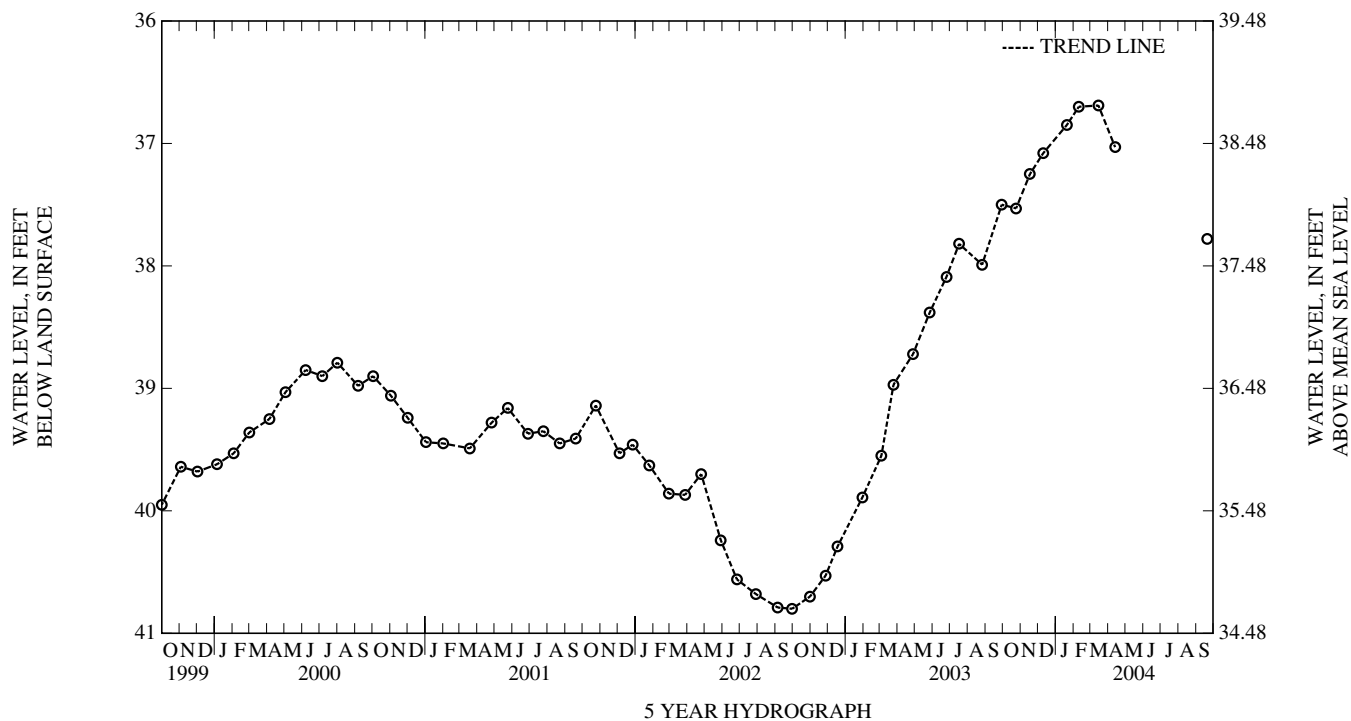
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.77 ft below land surface, September 14, 1987; lowest measured, 42.38 ft below land surface, September 7, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	37.53	DEC 10, 2003	37.08	FEB 10, 2004	36.70	APR 13, 2004	37.03
NOV 17	37.25	JAN 20, 2004	36.85	MAR 15	36.69	SEP 20	37.78
HIGHEST 36.69 MAR 15, 2004							
LOWEST 37.78 SEP 20, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 160. SITE ID.--390908076394402. PERMIT NUMBER.--AA-81-3461.

LOCATION.--Lat 39°09'08", long 76°39'44", Hydrologic Unit 02060003, 0.08 mi north of Queenstown Road, 0.41 mi. east of WB & A Road, at Queenstown Park. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 118 ft; casing diameter 6 in., to 105 ft. screen diameter 4 in., from 105 to 115 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from April 1985 to December 1996, and 30-minute recorder interval from December 1996 to current year.

DATUM.--Elevation of land surface is 88.0 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.50 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--April 1985 to current year.

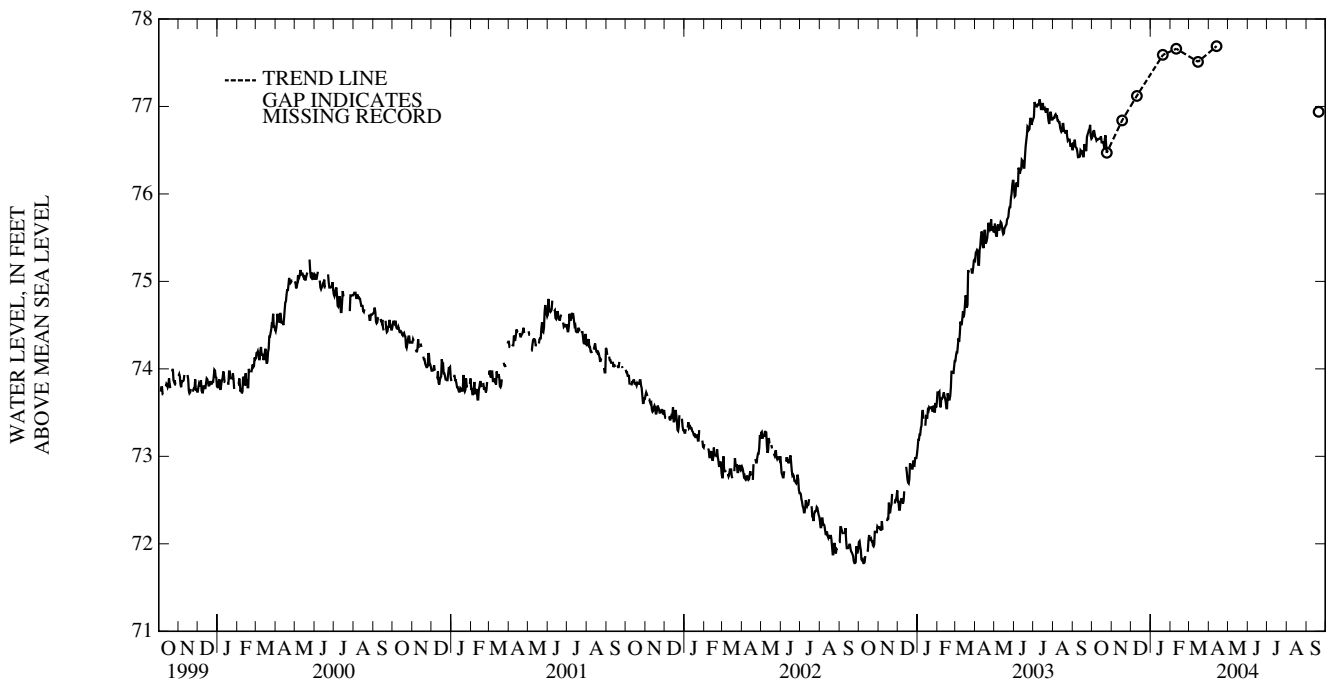
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 77.12 ft above sea level, July 11, 2003 (recorder); lowest measured, 66.30 ft above sea level, March 20, 1985.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	76.47	DEC 10, 2003	77.12	FEB 10, 2004	77.66	APR 13, 2004	77.69
NOV 17	76.84	JAN 20, 2004	77.59	MAR 15	77.51	SEP 20	76.94

LOWEST 76.47 OCT 24, 2003
 HIGHEST 77.69 APR 13, 2004

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bf 3. SITE ID.--390945076285601.

LOCATION.--Lat 39°09'45", long 76°28'56", Hydrologic Unit 02060003, 8 mi east of Glen Burnie at Fort Smallwood Park. Owner: Baltimore City Department of Recreation and Parks.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Dug, brick-lined, unused, water-table well, diameter 48 in., depth 22.8 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 20.38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in concrete cover at land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level measured 14.10 ft below land surface, January 27, 1944.

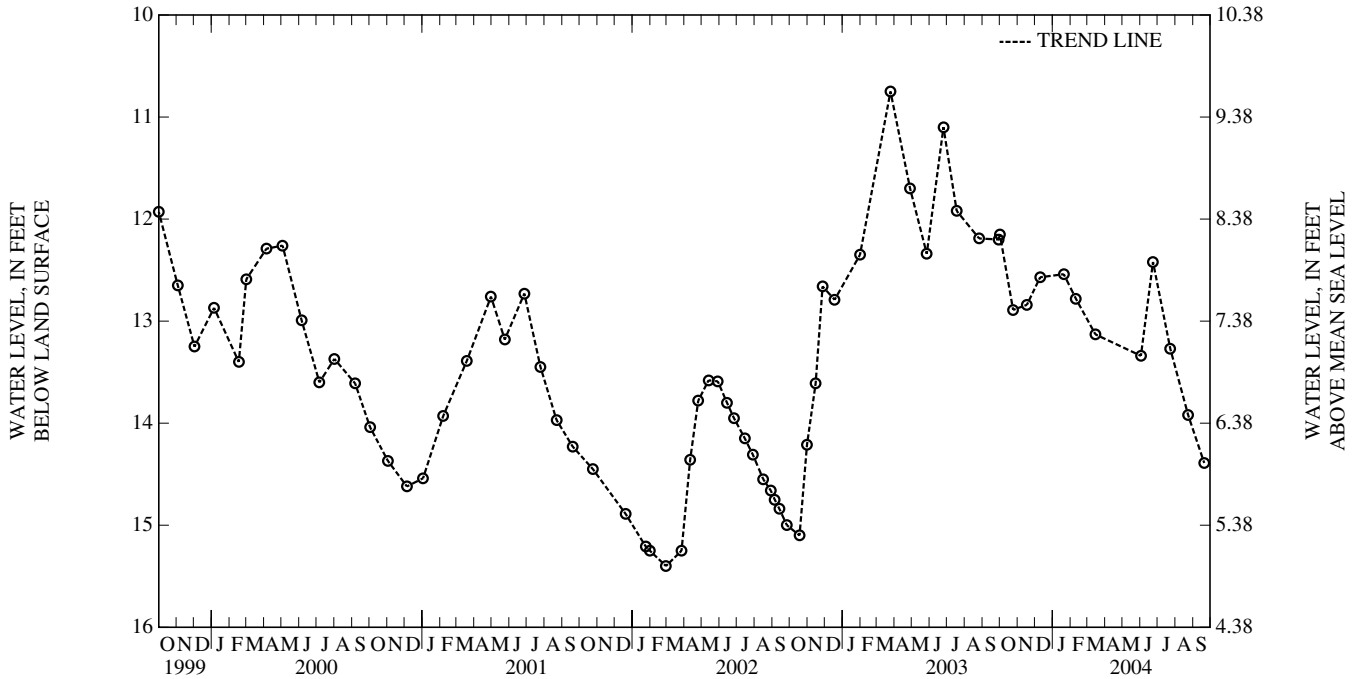
PERIOD OF RECORD.--April 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.40 ft below land surface, March 31, 1958; lowest measured, 19.09 ft below land surface, December 7, 1965.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2003	12.15	DEC 10, 2003	12.57	MAR 15, 2004	13.13	JUL 23, 2004	13.27
NOV 24	12.89	JAN 20, 2004	12.54	JUN 02	13.34	AUG 23	13.92
NOV 17	12.84	FEB 10	12.78	JUN 23	12.42	SEP 20	14.39

HIGHEST 12.15 OCT 01, 2003
 LOWEST 14.39 SEP 20, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bf 100. SITE ID.--390629076273601. PERMIT NUMBER.--AA-94-7214.

LOCATION.--Lat 39°06'29", long 76°27'36", Hydrologic Unit 02060003, at Chesapeake High School. Owner: Anne Arundel County School Board.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 145 ft; casing diameter 2in., to 125 ft; screen diameter 2 in., from 125 to 145 ft;

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 52 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

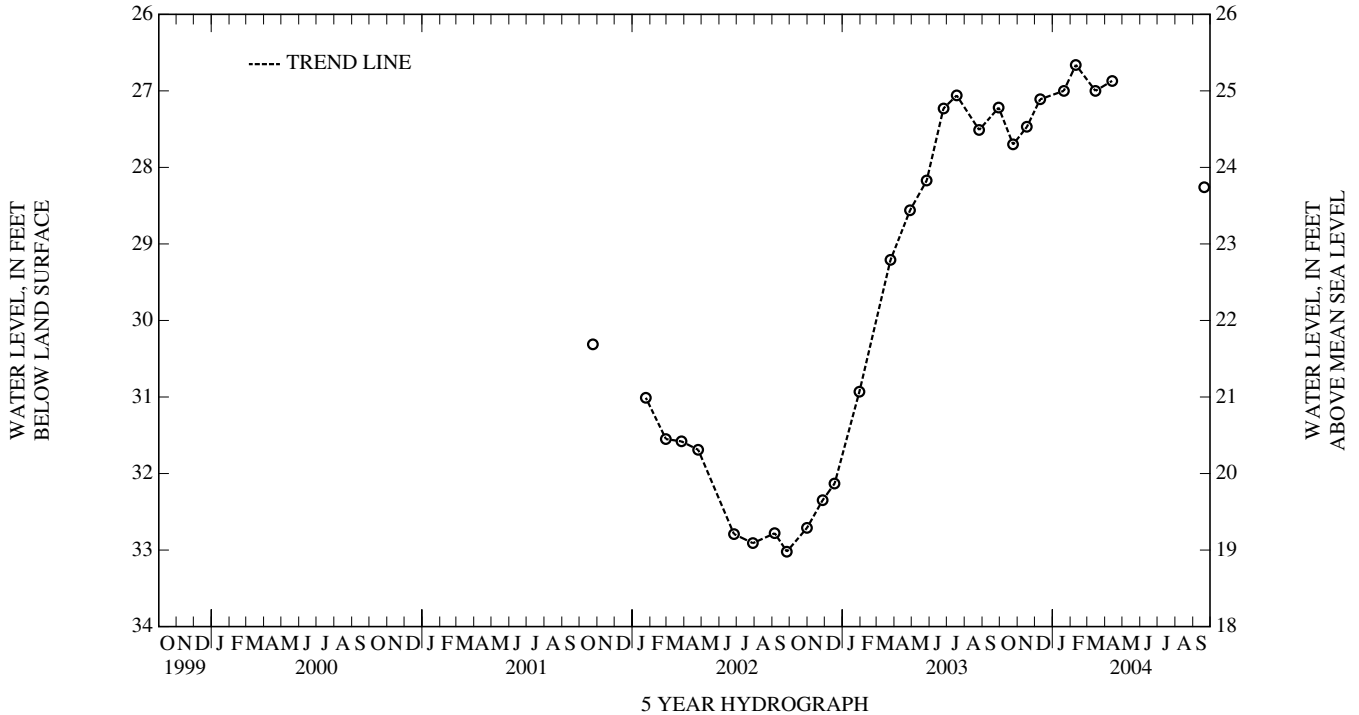
PERIOD OF RECORD.--October 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.66 ft below land surface, February 10, 2004; lowest measured, 33.02 ft below land surface, September 26, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	27.70	DEC 10, 2003	27.11	FEB 10, 2004	26.66	APR 13, 2004	26.87
NOV 17	27.47	JAN 20, 2004	27.00	MAR 15	27.00	SEP 20	28.26

HIGHEST 26.66 FEB 10, 2004
 LOWEST 33.02 SEP 26, 2002



ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cb 1. SITE ID.--390303076463201. PERMIT NUMBER.--AA-03-5695.

LOCATION.--Lat 39°03'03", long 76°46'32", Hydrologic Unit 02060006, on Duvall Bridge Rd., Patuxent Wildlife Research Center. Owner: U.S. Fish and Wildlife (formerly U.S. Army).

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 505 ft; casing diameter 6 in., to 485 ft; screen diameter 6 in., from 485 to 505 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from July 1984 to current year.

DATUM.--Elevation of land surface is 129.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 3.35 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

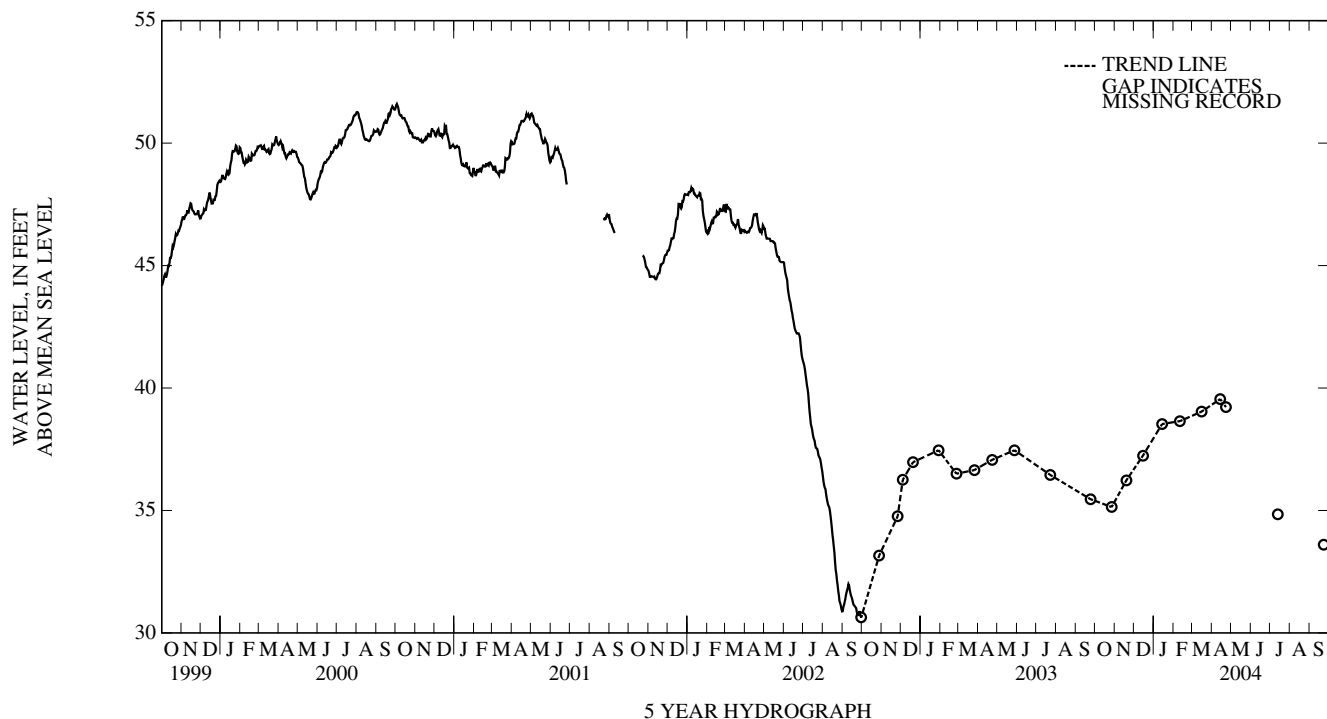
PERIOD OF RECORD.--March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.50 ft above sea level, May 1, 1962; lowest measured, 30.63 ft above sea level, September 30, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	35.14	JAN 14, 2004	38.53	APR 14, 2004	39.55	SEP 23, 2004	33.60
NOV 19	36.23	FEB 11	38.65	23	39.22		
DEC 15	37.24	MAR 16	39.04	JUL 13	34.84		
	LOWEST 33.60	SEP 23, 2004					
	HIGHEST 39.55	APR 14, 2004					

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cc 40. SITE ID.--390423076432001. PERMIT NUMBER.--AA-03-5693.

LOCATION.--Lat 39°04'23", long 76°43'20", Hydrologic Unit 02060006, on Rifle Range Rd., Fort George Meade. Owner: U.S. Army.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 238 ft; casing diameter 6 in., to 208 ft; screened diameter 6 in., from 208 to 238 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from December 1959 to July 1960 and a digital water-level recorder from January 1978 to December 1985.

DATUM.--Elevation of land surface is 136.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.60 ft above land surface.

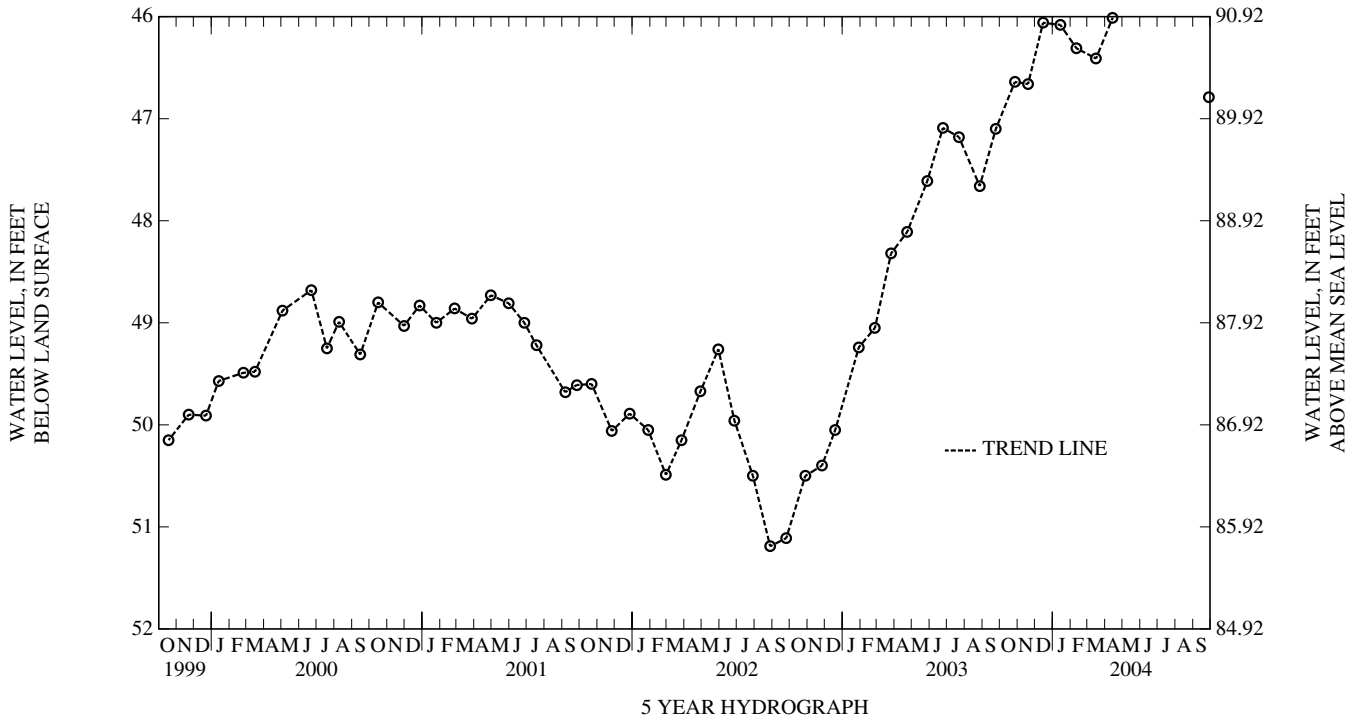
REMARKS.--Maryland Ground-Water-Level Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--December 1959 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.58 ft below land surface, March 25, 1961; lowest measured, 51.69 ft below land surface, September 1, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	46.64	DEC 15, 2003	46.06	FEB 11, 2004	46.31	APR 14, 2004	46.01
NOV 19	46.66	JAN 14, 2004	46.08	MAR 16	46.41	SEP 28	46.79
HIGHEST 46.01 APR 14, 2004							
LOWEST 46.79 SEP 28, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cc 135. SITE ID.--390126076403001. PERMIT NUMBER.--AA-93-0998.

LOCATION.--Lat 39°01'26", long 76°40'30", Hydrologic Unit 02060006, near Reidel Rd and Johns Hopkins Rd, at Crofton Meadows. Owner: Anne Arundel County.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,100 ft; casing diameter 4 in., to 299 ft, and casing diameter 2 in., from 299 to 985 ft, and 1,035 to 1,070 ft; screen diameter 2 in., from 985 to 1,035 ft, and 1,070 to 1,100 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from May 1998 to current year.

DATUM.--Elevation of land surface is 114.81 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.48 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--May 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.78 ft above sea level, May 4, 1999 (recorder); lowest measured, 49.92 ft below sea level, September 3, 2004 (recorder).

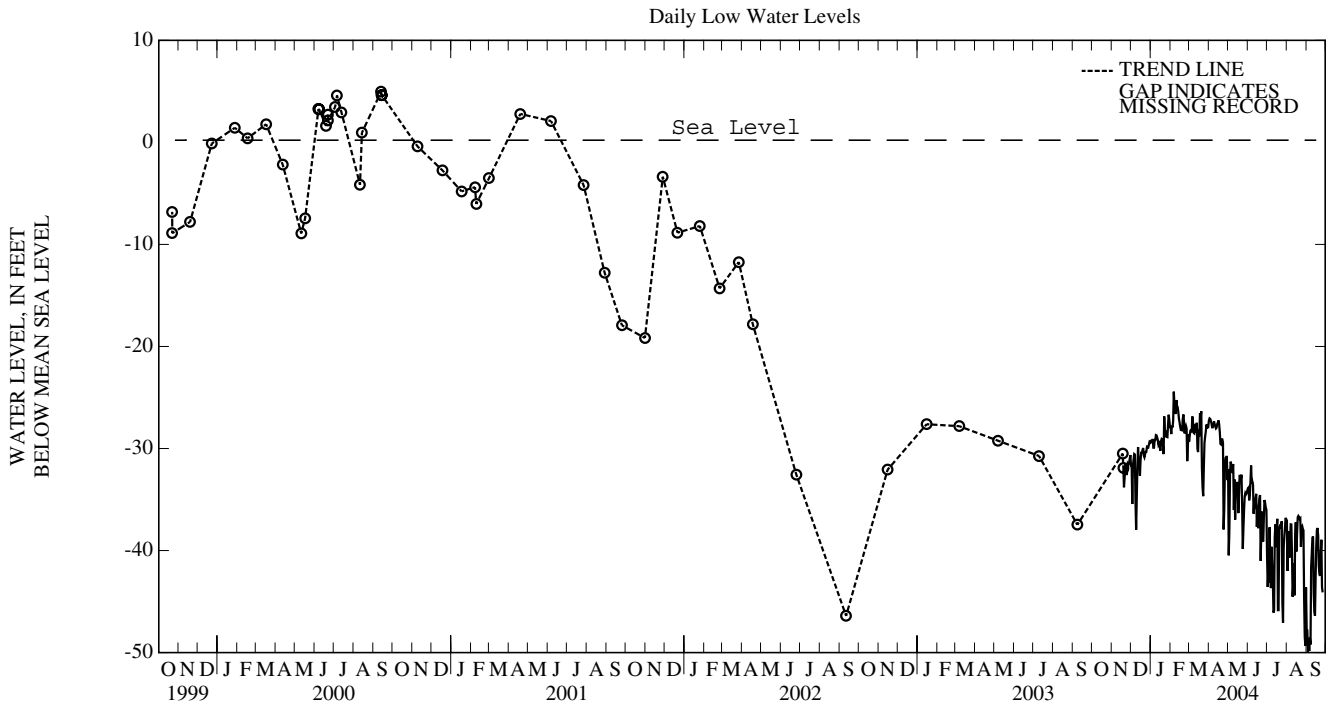
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18, 2003	-30.50	MAR 30, 2004	-26.33	AUG 04, 2004	-37.99
JAN 14, 2004	-28.88	JUN 09	-32.05	SEP 27	-40.45
LOWEST -40.45 SEP 27, 2004					
HIGHEST -26.33 MAR 30, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	-28.62	-31.70	-24.81	-29.30	-22.66	-27.91	-26.73	-29.32
2	---	---	---	---	-26.39	-31.72	-25.56	-29.37	-25.37	-28.59	-23.64	-28.69
3	---	---	---	---	-26.01	-35.44	-24.55	-29.39	-23.58	-27.77	-23.47	-28.24
4	---	---	---	---	-26.38	-31.65	-25.88	-29.06	-22.47	-27.94	-24.38	-28.20
5	---	---	---	---	-24.89	-31.08	-27.37	-29.92	-23.86	-27.28	-23.28	-28.41
6	---	---	---	---	-24.47	-30.54	-25.43	-29.92	-17.55	-24.43	-21.64	-26.86
7	---	---	---	---	-26.58	-30.59	-24.76	-29.17	-21.65	-25.77	-23.17	-27.45
8	---	---	---	---	-30.59	-35.17	-24.64	-29.17	-20.09	-26.16	-25.49	-28.45
9	---	---	---	---	-30.86	-37.96	-24.60	-28.68	-22.42	-26.62	-22.36	-28.51
10	---	---	---	---	-27.87	-34.83	-23.97	-28.71	-20.05	-25.25	-22.07	-27.77
11	---	---	---	---	-24.86	-31.92	-23.71	-28.93	-20.87	-25.83	-22.27	-27.61
12	---	---	---	---	-23.35	-29.86	-26.83	-29.18	-21.79	-25.94	-21.96	-28.42
13	---	---	---	---	-28.54	-31.18	-27.89	-29.63	-22.18	-26.42	-22.48	-27.48
14	---	---	---	---	-27.51	-31.46	-25.69	-29.51	-21.49	-27.09	-23.43	-30.03
15	---	---	---	---	-29.38	-32.66	-26.85	-29.88	-22.15	-27.43	-24.03	-30.35
16	---	---	---	---	-27.52	-31.10	-25.58	-30.22	-22.99	-27.87	-21.68	-28.13
17	---	---	---	---	-26.36	-30.32	-24.69	-29.26	-24.04	-28.18	-22.51	-28.80
18	---	---	---	---	-26.02	-30.52	-24.15	-29.05	-24.02	-28.20	-23.18	-26.55
19	---	---	-26.30	-31.91	-25.83	-30.15	-25.49	-29.09	-22.29	-28.22	-21.58	-27.05
20	---	---	-28.36	-33.80	-25.06	-29.95	-26.58	-29.76	-23.51	-27.12	-20.24	-26.35
21	---	---	-27.22	-32.88	-27.49	-30.70	-25.53	-30.55	-20.59	-26.67	-22.01	-31.91
22	---	---	-26.69	-31.53	-27.13	-30.86	-21.40	-26.86	-22.40	-27.38	-31.42	-33.81
23	---	---	-27.12	-31.79	-25.95	-30.56	-25.10	-28.54	-25.98	-28.52	-28.96	-34.67
24	---	---	-28.90	-32.60	-26.13	-30.33	-22.49	-28.65	-23.66	-27.99	-25.41	-31.84
25	---	---	-26.39	-32.30	-25.42	-30.32	-22.93	-28.21	-21.67	-27.79	-24.64	-29.46
26	---	---	-27.38	-31.48	-25.69	-29.82	-25.61	-28.87	-23.36	-28.03	-23.89	-28.84
27	---	---	-26.88	-31.58	-25.35	-29.85	-24.23	-28.89	-22.38	-31.24	-22.74	-28.37
28	---	---	-26.83	-31.41	-24.92	-29.89	-23.05	-27.65	-23.27	-29.71	-21.98	-27.66
29	---	---	-25.98	-31.00	-25.72	-29.62	-22.14	-26.69	-24.32	-28.60	-25.33	-28.06
30	---	---	-26.13	-30.64	-24.81	-29.35	-22.28	-27.24	---	---	-22.88	-27.77
31	---	---	---	---	-24.89	-29.42	-22.38	-27.90	---	---	-22.35	-27.82
MONTH	---	---	-25.98	-33.80	-23.35	-37.96	-21.40	-30.55	-17.55	-31.24	-20.24	-34.67

ANNE ARUNDEL COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-23.53	-27.24	-31.77	-32.06	-31.16	-33.91	-35.98	-40.54	-35.43	-37.06	-39.81	-47.78
2	-22.06	-27.05	-31.28	-40.47	-30.02	-33.83	-33.48	-43.57	-36.97	-41.99	-39.57	-47.81
3	-21.80	-27.10	-31.56	-37.92	-29.66	-35.08	-37.04	-42.07	-33.82	-39.15	-40.79	-49.92
4	-22.05	-27.26	-26.60	-32.53	-33.27	-34.57	-37.72	-43.14	-37.67	-38.13	-41.17	-48.85
5	-24.91	-27.56	-26.64	-31.29	-28.64	-33.27	-35.29	-37.72	-34.39	-40.69	-42.00	-49.84
6	-24.20	-27.92	-26.61	-31.57	-27.92	-31.67	-36.59	-41.63	-33.73	-39.00	-41.40	-48.54
7	-22.58	-27.92	-31.54	-32.40	-28.17	-33.41	-36.45	-43.68	-34.54	-37.43	-41.62	-49.21
8	-22.71	-27.62	-27.38	-31.91	-31.30	-33.26	-34.34	-39.63	-34.96	-37.44	-40.27	-41.62
9	-22.27	-27.35	-28.45	-31.53	-31.31	-33.55	-33.55	-41.39	-33.98	-40.19	-36.02	-40.27
10	-23.20	-27.63	-31.53	-36.02	-32.79	-36.39	-36.08	-42.82	-32.83	-44.52	-36.31	-38.75
11	-23.40	-27.84	-29.46	-33.03	-31.25	-35.01	-36.86	-46.08	-33.51	-43.36	-38.21	-38.62
12	-24.59	-28.03	-29.93	-36.97	-29.42	-35.93	-38.69	-45.88	-33.69	-41.26	-38.62	-44.15
13	-23.62	-27.95	-30.41	-34.55	-30.57	-34.89	-35.66	-38.69	-38.02	-44.39	-40.47	-45.93
14	-22.74	-27.58	-32.90	-33.57	-33.52	-34.44	-33.02	-37.44	-33.73	-38.47	-41.06	-46.39
15	-22.65	-27.45	-30.11	-33.58	-31.60	-37.68	-32.44	-39.66	-32.77	-37.23	-38.78	-42.63
16	-23.05	-27.25	-31.20	-33.27	-32.17	-35.69	-34.65	-37.99	-34.42	-40.09	-34.49	-39.52
17	-23.18	-27.63	-32.97	-36.33	-30.86	-37.81	-34.48	-36.89	-34.04	-38.27	-36.26	-37.98
18	-25.56	-28.41	-31.07	-34.73	-31.48	-35.61	-35.71	-45.84	-33.96	-36.74	-33.84	-37.79
19	-28.41	-29.55	-28.66	-32.68	-31.11	-34.85	-37.03	-45.84	-33.46	-36.61	-34.13	-38.55
20	-25.83	-29.60	-27.57	-32.68	-31.78	-34.56	-35.57	-37.93	-34.96	-36.71	-38.14	-41.49
21	-25.41	-29.12	-29.79	-33.00	-34.09	-41.01	-37.25	-37.61	-34.79	-36.90	-34.32	-42.33
22	-25.32	-29.11	-29.14	-32.57	-32.22	-37.95	-36.07	-37.68	-34.55	-36.84	-34.78	-42.48
23	-26.36	-29.42	-32.50	-35.73	-31.55	-36.19	-34.83	-37.47	-36.61	-39.64	-34.99	-40.53
24	-26.57	-37.93	-35.73	-39.84	-31.79	-38.88	-33.46	-37.13	-35.40	-37.72	-36.86	-38.94
25	-31.60	-35.93	-33.59	-37.78	-32.35	-39.11	-33.58	-45.18	-36.86	-37.61	-35.88	-43.59
26	-30.95	-31.84	-33.19	-35.99	-31.63	-36.75	-39.77	-47.07	-37.61	-37.89	-38.13	-44.10
27	-27.34	-30.95	-31.27	-34.69	-31.73	-35.05	-35.14	-39.77	-37.89	-38.01	---	---
28	-26.90	-30.82	-31.80	-34.37	-34.43	-35.34	-33.50	-38.60	-37.97	-44.56	---	---
29	-26.68	-30.82	-30.94	-34.49	-35.34	-35.80	-32.39	-37.77	-38.82	-48.46	---	---
30	-27.81	-33.10	-32.17	-34.38	-35.80	-36.01	-33.64	-36.80	-42.65	-49.33	---	---
31	---	---	-31.16	-34.11	---	---	-33.91	-36.93	-38.50	-43.62	---	---
MONTH	-21.80	-37.93	-26.60	-40.47	-27.92	-41.01	-32.39	-47.07	-32.77	-49.33	-33.84	-49.92
YEAR	-17.55	-49.92										



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cc 137. SITE ID.--390126076402901. PERMIT NUMBER.--AA-93-0993.

LOCATION.--Lat 39°01'26", long 76°40'29", Hydrologic Unit 02060006, near Reidel Rd and Johns Hopkins Rd, at Crofton Meadows. Owner: Anne Arundel County.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 690 ft; casing diameter 4 in., to 300 ft, and casing diameter 2 in., from 300 to 476 ft, and 506 to 536 ft, 576 to 606 ft, and 686 to 690 ft; screen diameter 2 in., from 476 to 506 ft, and 536 to 576 ft, and 606 to 686 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from May 1998 to current year.

DATUM.--Elevation of land surface is 115.34 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.10 ft above land surface.

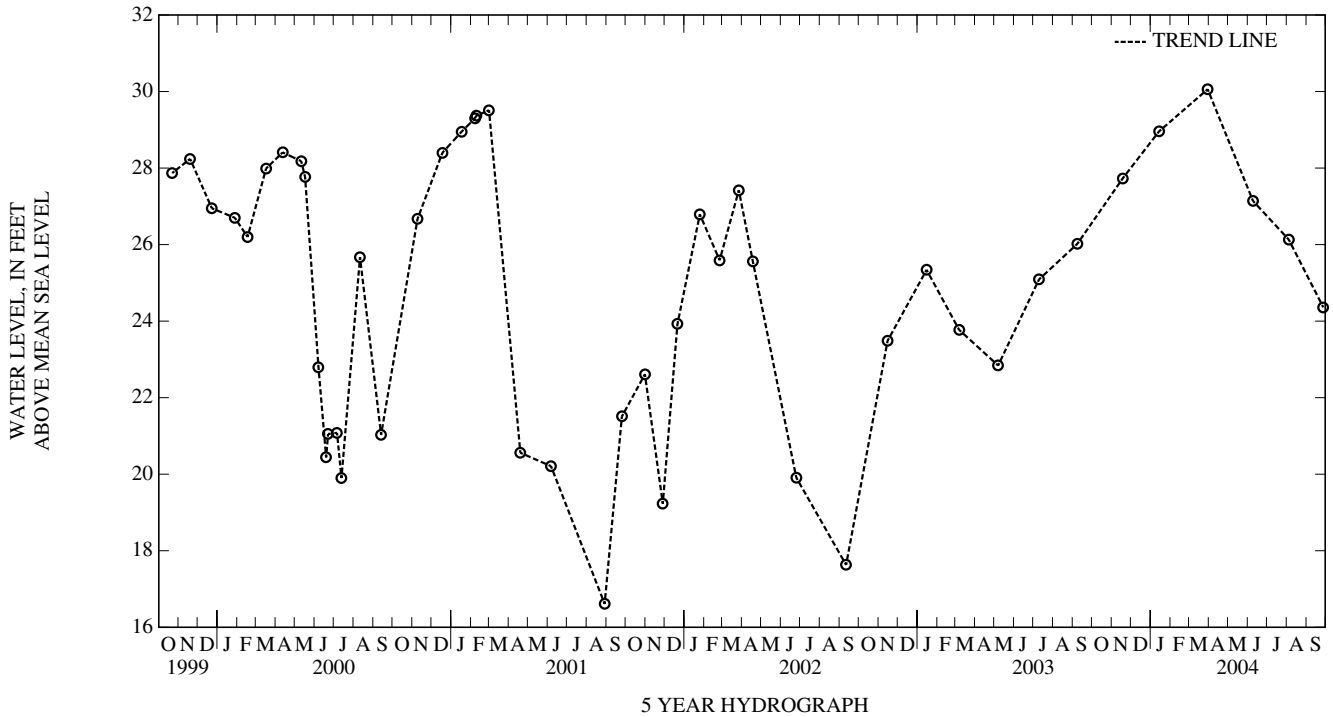
REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.28 ft above sea level, February 17, 2001 (recorder); lowest measured, 4.49 ft above sea level, June 2, 1999 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

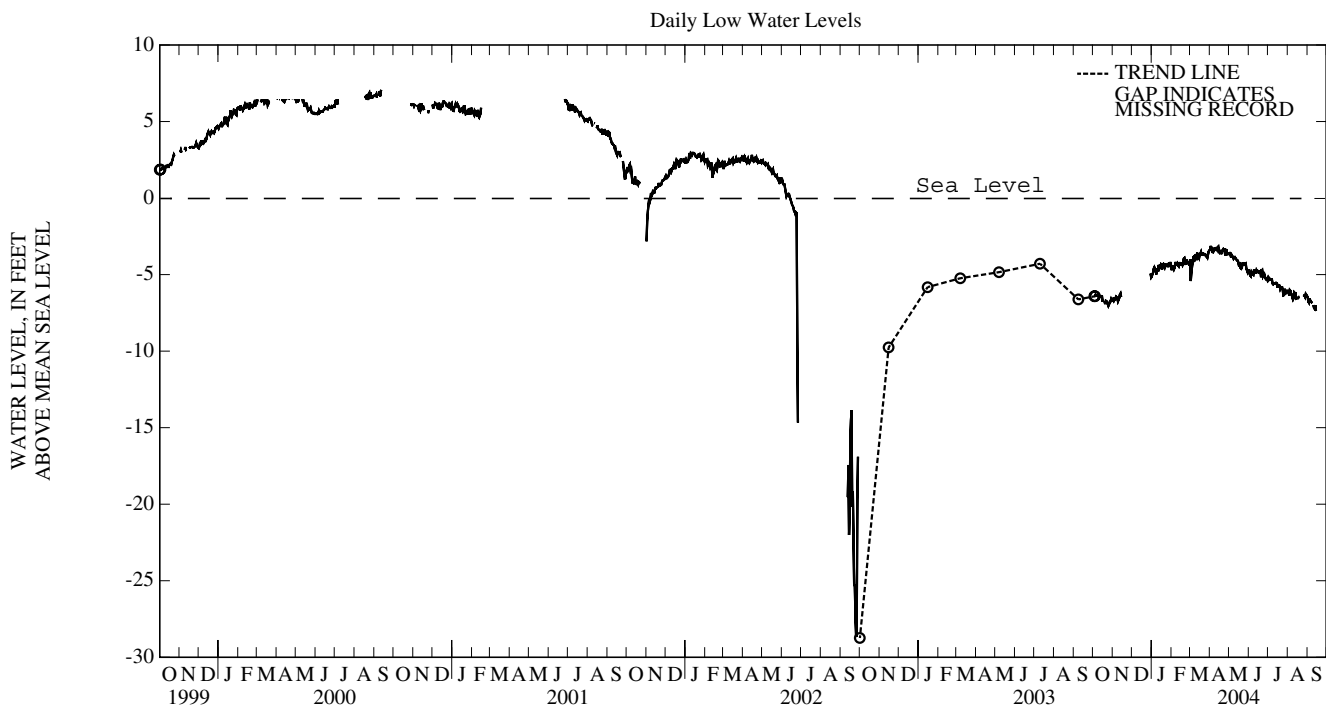
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18, 2003	27.73	MAR 30, 2004	30.06	AUG 04, 2004	26.13
JAN 14, 2004	28.96	JUN 09	27.14	SEP 27	24.36
LOWEST 24.36 SEP 27, 2004					
HIGHEST 30.06 MAR 30, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

DAY	MIN		MIN		MIN		MIN		MIN		MIN	
	APRIL	APRIL	MAY	MAY	JUNE	JUNE	JULY	JULY	AUGUST	AUGUST	SEPTEMBER	SEPTEMBER
1	-3.40	-3.40	-3.63	-3.63	-4.73	-4.73	-5.21	-5.21	-6.06	-6.06	-6.45	-6.45
2	-3.19	-3.19	-3.60	-3.60	-4.92	-4.92	-5.33	-5.33	-6.08	-6.08	-6.77	-6.77
3	-3.19	-3.19	-3.68	-3.68	-5.06	-5.06	-5.24	-5.24	-6.36	-6.36	-6.84	-6.84
4	-3.27	-3.27	-3.87	-3.87	-5.11	-5.11	-5.29	-5.29	-6.01	-6.01	-6.56	-6.56
5	-3.53	-3.53	-3.72	-3.72	-4.85	-4.85	-5.31	-5.31	-6.06	-6.06	-6.68	-6.68
6	-3.54	-3.54	-3.80	-3.80	-4.94	-4.94	-5.30	-5.30	-6.23	-6.23	-6.75	-6.75
7	-3.41	-3.41	-3.83	-3.83	-4.97	-4.97	-5.31	-5.31	-6.30	-6.30	-6.80	-6.80
8	-3.28	-3.28	-3.96	-3.96	-5.01	-5.01	-5.59	-5.59	-6.50	-6.50	-6.87	-6.87
9	-3.27	-3.27	-3.90	-3.90	-4.68	-4.68	-5.64	-5.64	-6.63	-6.63	---	---
10	-3.33	-3.33	-3.86	-3.86	-4.79	-4.79	-5.59	-5.59	-6.54	-6.54	-6.99	-6.99
11	-3.40	-3.40	-3.92	-3.92	-4.77	-4.77	-5.58	-5.58	-6.16	-6.16	-7.19	-7.19
12	-3.41	-3.41	-3.98	-3.98	-4.94	-4.94	-5.60	-5.60	-6.21	-6.21	-7.24	-7.24
13	-3.21	-3.21	-4.06	-4.06	-4.71	-4.71	-5.54	-5.54	-6.21	-6.21	-7.00	-7.00
14	-3.17	-3.17	-4.06	-4.06	-4.78	-4.78	-5.54	-5.54	-6.57	-6.57	-7.36	-7.36
15	-3.60	-3.60	-4.13	-4.13	-4.77	-4.77	-5.58	-5.58	-6.55	-6.55	---	---
16	-3.46	-3.46	-4.33	-4.33	-4.85	-4.85	-5.85	-5.85	-6.54	-6.54	---	---
17	-3.60	-3.60	-4.27	-4.27	-4.81	-4.81	-5.71	-5.71	-6.54	-6.54	---	---
18	-3.58	-3.58	-4.26	-4.26	-4.83	-4.83	-5.71	-5.71	-6.46	-6.46	---	---
19	-3.60	-3.60	-4.58	-4.58	-4.78	-4.78	-5.72	-5.72	-6.46	-6.46	---	---
20	-3.48	-3.48	-4.62	-4.62	-5.17	-5.17	-5.93	-5.93	---	---	---	---
21	-3.38	-3.38	-4.55	-4.55	-4.85	-4.85	-5.82	-5.82	---	---	---	---
22	-3.32	-3.32	-4.26	-4.26	-4.77	-4.77	-5.82	-5.82	-6.51	-6.51	---	---
23	-3.36	-3.36	-4.25	-4.25	-5.11	-5.11	-5.82	-5.82	---	---	---	---
24	-3.46	-3.46	-4.26	-4.26	-5.02	-5.02	-6.03	-6.03	---	---	---	---
25	-3.74	-3.74	-4.33	-4.33	-4.96	-4.96	-6.36	-6.36	-6.34	-6.34	---	---
26	-3.38	-3.38	-4.28	-4.28	-5.13	-5.13	-6.34	-6.34	-6.36	-6.36	---	---
27	-3.40	-3.40	-4.26	-4.26	-5.22	-5.22	-5.93	-5.93	-6.36	-6.36	---	---
28	-3.67	-3.67	-4.61	-4.61	-5.36	-5.36	-6.09	-6.09	-6.46	-6.46	---	---
29	-3.67	-3.67	-4.73	-4.73	-5.18	-5.18	-6.27	-6.27	-6.26	-6.26	---	---
30	-3.63	-3.63	-4.85	-4.85	-5.33	-5.33	-6.06	-6.06	-6.32	-6.32	---	---
31	---	---	-4.73	-4.73	---	---	-6.06	-6.06	-6.43	-6.43	---	---
MAX	-3.17	-3.17	-3.60	-3.60	-4.68	-4.68	-5.21	-5.21	-6.01	-6.01	-6.45	-6.45
MIN	-3.74	-3.74	-4.85	-4.85	-5.36	-5.36	-6.36	-6.36	-6.63	-6.63	-7.36	-7.36
YEAR	MIN	MIN	MAXIMUM	MAXIMUM	MINIMUM	MINIMUM	MINIMUM	MINIMUM	MINIMUM	MINIMUM	MINIMUM	MINIMUM



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cf 98. SITE ID.--390150076283003. PERMIT NUMBER.--AA-70-0199.

LOCATION.--Lat 39°01'50", long 76°28'30", Hydrologic Unit 02060004, 3.1 mi northeast of Annapolis, near Anne Arundel Co. Traffic Engineering Building, Broad Neck. Owner: Anne Arundel Co. Dept. of Recreation and Parks.

AQUIFER.--Severn Formation (Monmouth aquifer) of Upper Cretaceous age. Aquifer code: 211SVRN.

WELL CHARACTERISTICS.--Drilled, artesian, observation well, depth 100 ft; casing diameter 2 in., to 90 ft; screen diameter 2 in., from 90 to 100 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from September 1969 to September 1986, and April 1989 to February 1999.

DATUM.--Elevation of land surface is 93.42 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.51 ft above land surface.

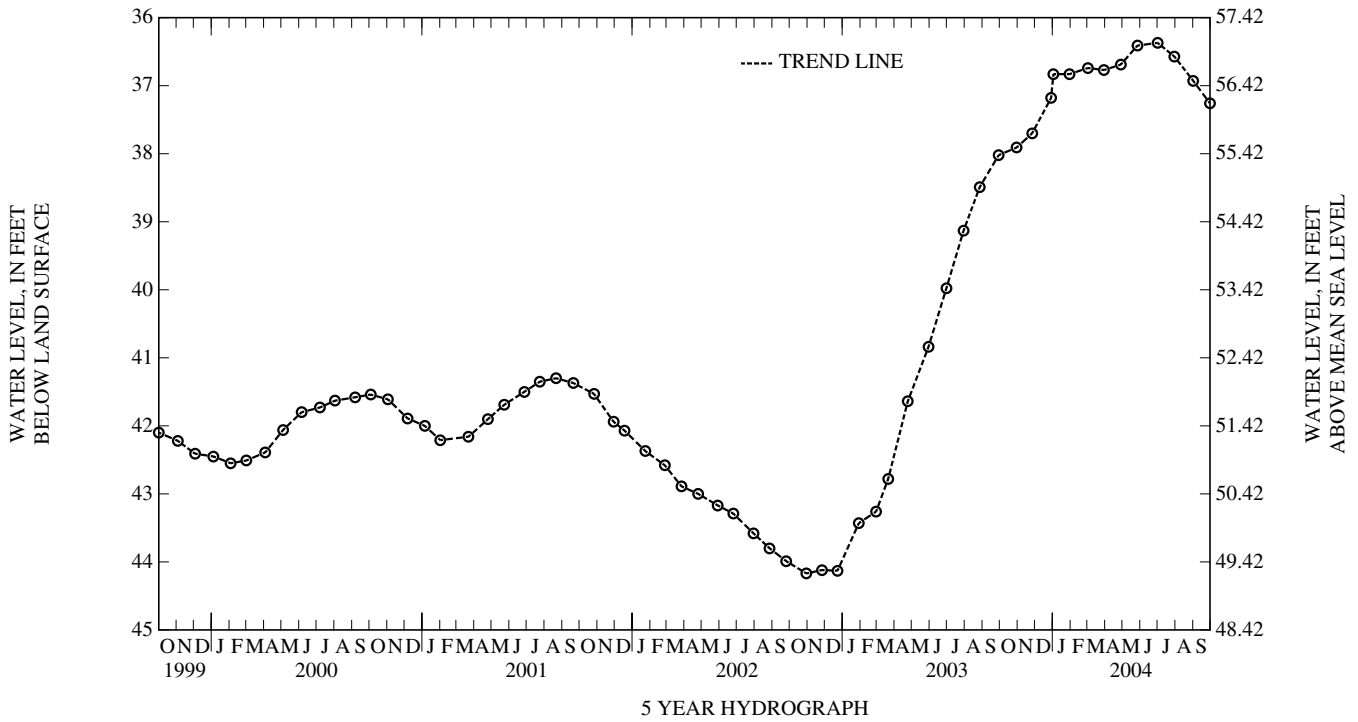
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--September 1969 to September 1986, April 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.14 ft below land surface, August 3, 1972; lowest measured, 44.39 ft below land surface, November 15, 1988.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	37.91	JAN 30, 2004	36.83	MAY 27, 2004	36.41	SEP 30, 2004	37.26
NOV 26	37.70	MAR 02	36.74	JUL 01	36.37		
DEC 29	37.18	30	36.77	30	36.57		
JAN 02, 2004	36.83	APR 28	36.69	SEP 01	36.93		
HIGHEST	36.37	JUL 01, 2004					
LOWEST	37.91	OCT 30, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cf 99. SITE ID.--390150076283002. PERMIT NUMBER.--AA-70-0199.

LOCATION.--Lat 39°01'50", long 76°28'30", Hydrologic Unit 02060004, 3.1 mi northeast of Annapolis, near Anne Arundel Co. Traffic Engineering Building, Broad Neck. Owner: Anne Arundel Co. Dept. of Recreation and Parks.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, artesian, observation well, depth 220 ft; casing diameter 2 in., to 210 ft; screen diameter 2 in., from 210 to 220 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with graphic water-level recorder from September 1969 to July 1971.

DATUM.--Elevation of land surface is 93.70 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

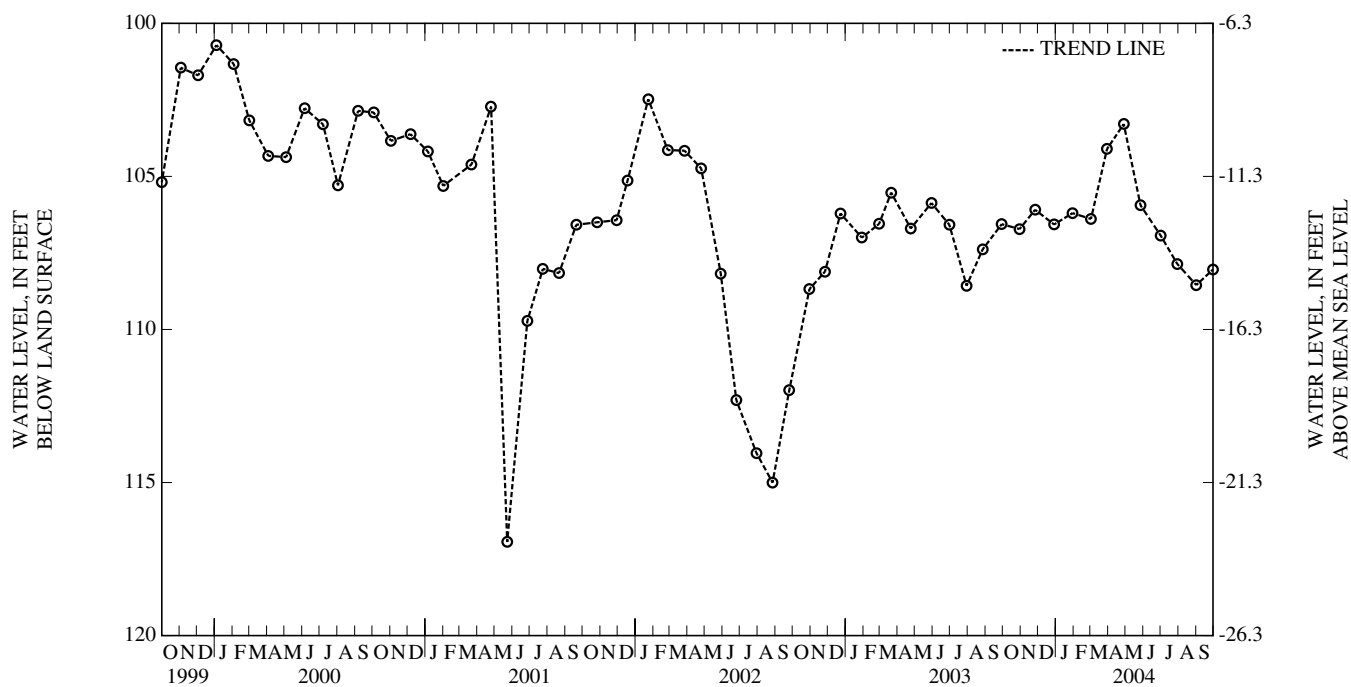
PERIOD OF RECORD.--September 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.29 ft below land surface, April 13, 1976; lowest measured, 116.94 ft below land surface, May 23, 2001.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	106.72	JAN 30, 2004	106.20	APR 28, 2004	103.29	JUL 30, 2004	107.86
NOV 26	106.09	MAR 02	106.39	MAY 27	105.94	SEP 01	108.55
DEC 29	106.57	30	104.10	JUL 01	106.93	30	108.04

HIGHEST 103.29 APR 28, 2004
LOWEST 108.55 SEP 01, 2004



ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cf 137. SITE ID.--390205076292702. PERMIT NUMBER.--AA-86-0401.

LOCATION.--Lat 39°02'05", long 76°29'27", Hydrologic Unit 02060004, at the Arnold Water Treatment Plant, on the south side of Jones Station Road, 0.6 mile southeast of College Parkway. Owner: Anne Arundel County Department of Public Works

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,030 ft; casing diameter 6 in., to 543 ft; 4 in. from 543 to 791 ft., 816 to 826 ft, 856 to 876 ft, 896 to 916 ft, and 966 to 976 ft; screen diameter 4 in., from 791 to 816 ft, 826 to 856 ft, 876 to 896 ft, and 916 to 966 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel. Equipped with a digital water-level recorder 15-minute interval September 8, 2003 to current year.

DATUM.--Altitude of land surface is 124.28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.50 ft above land surface.

REMARKS.--Anne Arundel County Network observation well.

PERIOD OF RECORD.--March 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.48 ft above sea level, March 18 and 19, 1991; lowest measured, 76.87 ft below sea level, May 11, 1999.

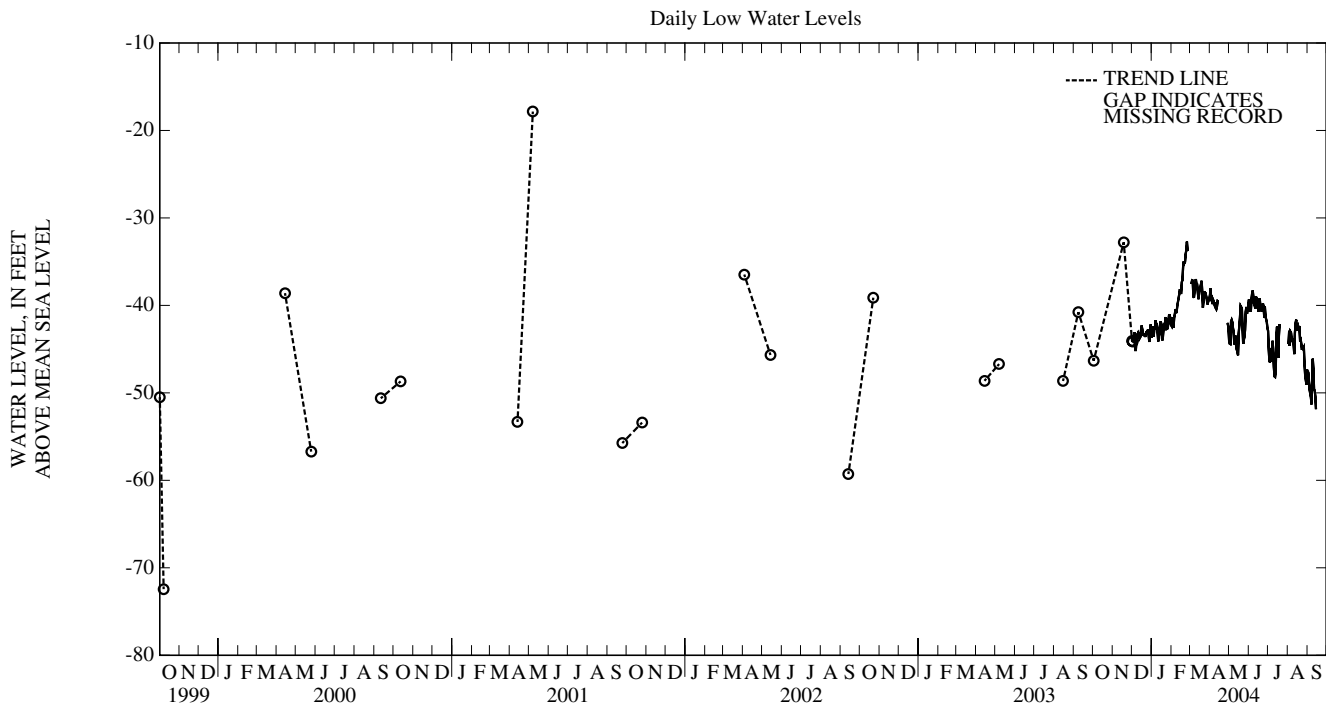
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	-46.32	JAN 14, 2004	-41.36	APR 15, 2004	-38.88	JUL 20, 2004	-39.85
NOV 18	-32.79	FEB 27	-31.80	JUN 10	-39.02	SEP 15	-48.36
LOWEST -48.36		SEP 15, 2004					
HIGHEST -31.80		FEB 27, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	-26.86	-44.05	-25.48	-43.69	-24.93	-42.35	---	---
2	---	---	---	---	-26.70	-44.12	-25.42	-43.10	-26.24	-41.50	---	---
3	---	---	---	---	-26.27	-43.53	-25.00	-42.38	-25.69	-41.47	-28.17	-37.55
4	---	---	---	---	-26.92	-43.40	-25.28	-43.56	-27.59	-42.55	-28.53	-37.13
5	---	---	---	---	-25.74	-43.07	-25.84	-42.58	-26.70	-41.43	-28.50	-37.16
6	---	---	---	---	-25.91	-45.10	-26.10	-42.61	-25.52	-41.01	-27.22	-38.96
7	---	---	---	---	-27.06	-45.10	-25.09	-41.69	-24.70	-40.48	-28.83	-39.13
8	---	---	---	---	-26.66	-43.95	-25.78	-42.21	-25.26	-40.88	-29.15	-38.27
9	---	---	---	---	-26.40	-43.40	-25.32	-42.18	-25.65	-40.65	-29.12	-37.72
10	---	---	---	---	-26.10	-43.23	-25.22	-43.03	-25.85	-39.99	-29.12	-36.99
11	---	---	---	---	-25.74	-43.72	-25.94	-44.12	-24.90	-39.56	-28.60	-37.62
12	---	---	---	---	-26.07	-43.07	-27.81	-43.56	-24.80	-39.14	-28.11	-37.62
13	---	---	---	---	-25.45	-43.76	-26.37	-43.10	-24.83	-38.68	-28.11	-38.47
14	---	---	---	---	-25.58	-43.63	-25.68	-42.19	-23.78	-38.15	-28.47	-39.29
15	---	---	---	---	-26.30	-42.90	-26.18	-41.83	-24.60	-38.58	-29.97	-38.73
16	---	---	---	---	-25.97	-42.31	-25.88	-42.16	-25.52	-38.58	-29.22	-38.01
17	---	---	---	---	-25.65	-42.67	-25.49	-43.83	-25.42	-37.33	-28.47	-37.95
18	---	---	---	---	-25.68	-43.20	-25.98	-43.99	-23.91	-37.10	-28.56	-37.55
19	---	---	---	---	-25.45	-43.40	-26.51	-42.98	-23.75	-35.59	-29.22	-37.19
20	---	---	---	---	-25.12	-43.43	-26.11	-42.25	-23.39	-34.97	-28.20	-38.47
21	---	---	---	---	-26.00	-43.36	-26.21	-42.12	-22.44	-35.17	-29.94	-40.27
22	---	---	---	---	-25.68	-43.60	-25.39	-41.83	-22.63	-35.04	-30.99	-39.42
23	---	---	---	---	-25.81	-43.10	-25.59	-41.34	-23.26	-34.12	-29.78	-38.37
24	---	---	---	---	-26.10	-43.03	-24.93	-42.71	-22.93	-33.69	-29.12	-38.86
25	---	---	---	---	-26.01	-43.03	-25.42	-42.68	-22.21	-32.71	-28.99	-38.54
26	---	---	---	---	-25.28	-42.77	-25.98	-42.62	-22.14	-33.79	-30.27	-38.90
27	---	---	---	---	-25.71	-43.36	-25.62	-41.83	---	---	-28.79	-39.26
28	---	---	---	---	-25.12	-44.18	-25.36	-41.11	---	---	-29.84	-39.88
29	---	---	---	---	-26.14	-42.94	-25.19	-41.11	---	---	-30.73	-39.65
30	---	---	---	---	-25.30	-42.20	-24.90	-41.47	---	---	-30.01	-39.39
31	---	---	---	---	-26.01	-42.64	-25.10	-42.22	---	---	-30.53	-39.29
MONTH	---	---	---	---	-25.12	-45.10	-24.90	-44.12	-22.14	-42.55	-27.22	-40.27

ANNE ARUNDEL COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER						
1	-29.38	-38.83	-33.75	-44.05	-31.75	-39.33	-35.12	-42.90	---	---	-40.32	-47.71
2	-29.42	-38.04	-33.65	-44.38	-32.34	-39.69	-36.76	-45.00	-36.25	-44.42	-40.22	-47.71
3	-29.42	-39.32	-35.06	-44.42	-32.01	-40.12	-37.19	-46.31	-35.70	-42.91	-41.04	-48.72
4	-29.61	-39.52	-32.80	-41.86	-33.52	-40.74	-38.34	-46.51	-36.62	-44.62	-41.24	-49.64
5	-31.45	-39.19	-33.33	-41.66	-31.32	-39.33	-36.17	-44.87	-35.63	-43.01	-41.83	-50.10
6	-30.30	-39.36	-32.97	-41.89	-30.24	-38.64	-37.55	-45.82	-35.01	-43.14	-44.13	-50.49
7	-31.09	-39.62	-33.98	-42.55	-31.46	-38.31	-39.32	-46.41	-35.40	-44.06	-48.10	-51.31
8	-30.53	-39.88	-32.93	-43.00	-31.39	-39.03	-36.99	-44.05	-35.30	-43.83	-42.00	-48.20
9	-30.86	-39.68	-33.75	-44.28	-31.72	-39.79	-36.47	-44.97	-36.98	-44.23	-39.27	-46.10
10	-30.11	-40.31	-35.85	-44.48	-32.31	-40.01	-38.37	-47.03	-37.14	-44.46	-38.72	-47.28
11	-30.73	-40.44	-34.64	-43.46	-32.79	-40.37	-41.55	-48.12	-37.57	-45.57	-40.09	-49.58
12	-31.19	-40.14	-36.38	-44.65	-30.56	-38.99	-40.96	-48.18	-35.57	-43.18	-40.36	-49.74
13	-30.86	-39.52	-36.11	-45.07	-31.25	-39.16	-38.44	-47.49	-34.58	-42.06	-42.62	-50.40
14	-30.96	-39.59	-37.33	-45.30	-32.43	-40.14	-36.63	-43.49	-33.60	-41.64	-49.25	-51.87
15	---	---	-36.80	-45.70	-32.53	-40.14	-34.93	-42.44	-33.50	-42.88	---	---
16	---	---	-35.33	-43.20	-32.99	-40.70	-36.73	-44.61	-34.52	-42.55	---	---
17	---	---	-35.10	-42.35	-32.30	-39.39	-36.96	-45.98	-34.45	-42.36	---	---
18	---	---	-33.79	-41.36	-31.88	-39.22	-36.21	-43.49	-34.91	-42.75	---	---
19	---	---	-33.46	-40.08	-30.89	-40.18	-34.86	-42.14	-34.65	-42.36	---	---
20	---	---	-32.90	-40.22	-32.01	-40.14	---	---	-36.19	-43.90	---	---
21	---	---	-33.56	-40.28	-32.89	-40.70	---	---	-36.06	-43.83	---	---
22	---	---	-32.67	-42.55	-32.66	-40.31	---	---	-35.07	-44.39	---	---
23	---	---	-33.92	-44.38	-32.30	-39.78	---	---	-37.70	-45.08	---	---
24	---	---	-36.41	-43.99	-31.74	-40.14	---	---	-36.94	-44.62	---	---
25	---	---	-35.59	-43.60	-32.66	-41.39	---	---	-37.47	-44.88	---	---
26	---	---	-34.34	-42.81	-32.04	-40.11	---	---	-36.81	-44.75	---	---
27	---	---	-32.34	-40.71	-32.53	-41.26	---	---	-38.09	-46.62	---	---
28	-32.60	-42.02	-32.90	-40.18	-34.57	-41.59	---	---	-38.62	-47.90	---	---
29	-32.67	-42.12	-31.78	-40.97	-33.55	-41.88	---	---	-39.57	-48.49	---	---
30	-33.79	-42.61	-32.34	-40.51	-34.86	-42.60	---	---	-42.88	-49.05	---	---
31	---	---	-32.74	-40.05	---	---	---	---	-39.14	-47.34	---	---
MONTH	-29.38	-42.61	-31.78	-45.70	-30.24	-42.60	-34.86	-48.18	-33.50	-49.05	-38.72	-51.87
YEAR	-22.14	-51.87										



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY—Continued

WELL NUMBER.--AA Cg 22. SITE ID.--390123076241601. PERMIT NUMBER.--AA-73-8606.

LOCATION.--Lat 39°01'23", long 76°24'16", Hydrologic Unit 02060004, 1,500 ft northeast of Oceanic Dr. and South Beach Rd., at Sandy Point State Park. Owner: U.S. Geological Survey

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,760 ft; casing diameter 10 in., to 163 ft; casing diameter 8 in., 0 to 1,760 ft; screen diameter 4 in., from 1,735 to 1,755 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 12.61 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

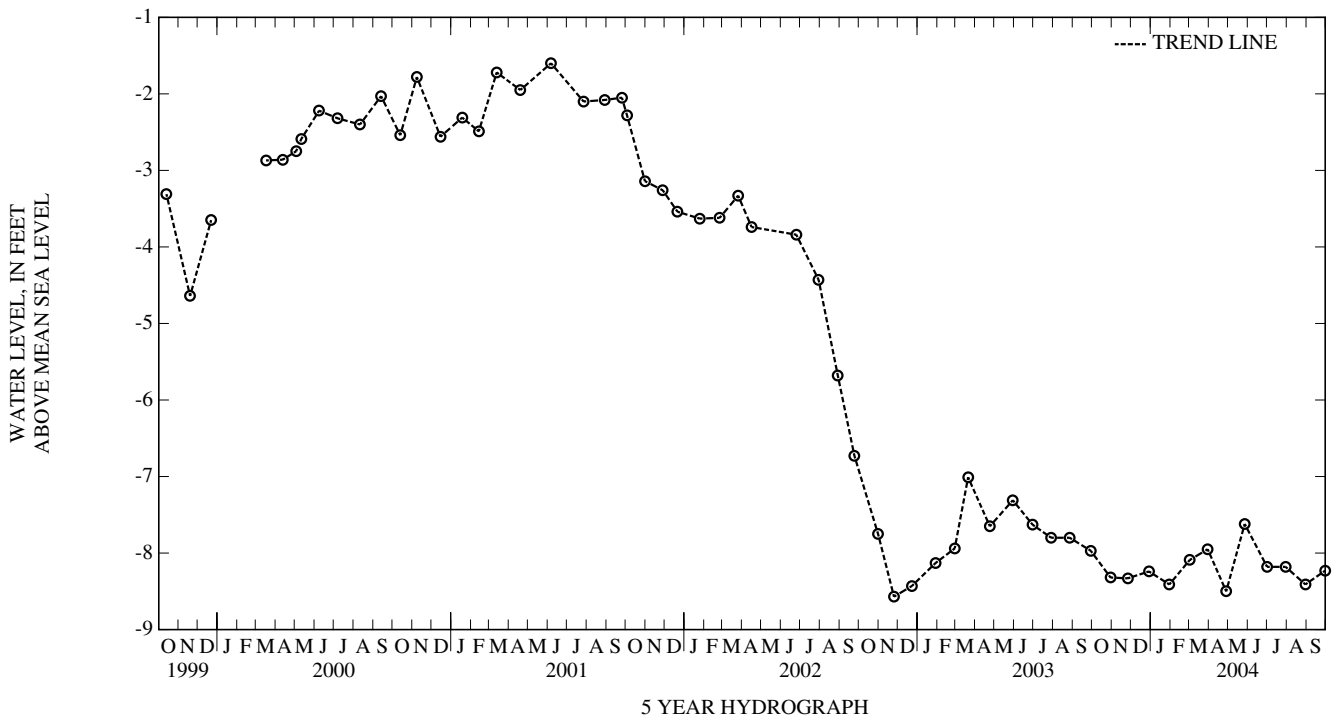
PERIOD OF RECORD.--September 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.47 ft above sea level, September 6, 1979; lowest measured, 8.57 ft below sea level, November 25, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	-8.32	JAN 30, 2004	-8.41	APR 28, 2004	-8.50	JUL 30, 2004	-8.18
NOV 26	-8.33	MAR 02	-8.09	MAY 27	-7.62	AUG 30	-8.41
DEC 29	-8.24	30	-7.95	JUL 01	-8.18	SEP 30	-8.23

LOWEST -8.50 APR 28, 2004
 HIGHEST -7.62 MAY 27, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cg 23. SITE ID.--390123076241602. PERMIT NUMBER.--AA-73-8959.

LOCATION.--Lat 39°01'23", long 76°24'16", Hydrologic Unit 02060004, 1500 ft northeast of Oceanic Dr. and South Beach Rd., at Sandy Point State Park.
Owner: U.S. Geological Survey

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 986 ft; casing diameter 4 in., to 968 ft; and 978 to 986 ft; screen diameter 4 in., from 968 to 978 ft.

INSTRUMENTATION.-- Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.
Equipped with a graphic water-level recorder from September 1978 to February 1980. Equipped with digital water-level recorder--60-minute recorder interval from September 1990 to August 2001.

DATUM.--Elevation of land surface is 12.57 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 3.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

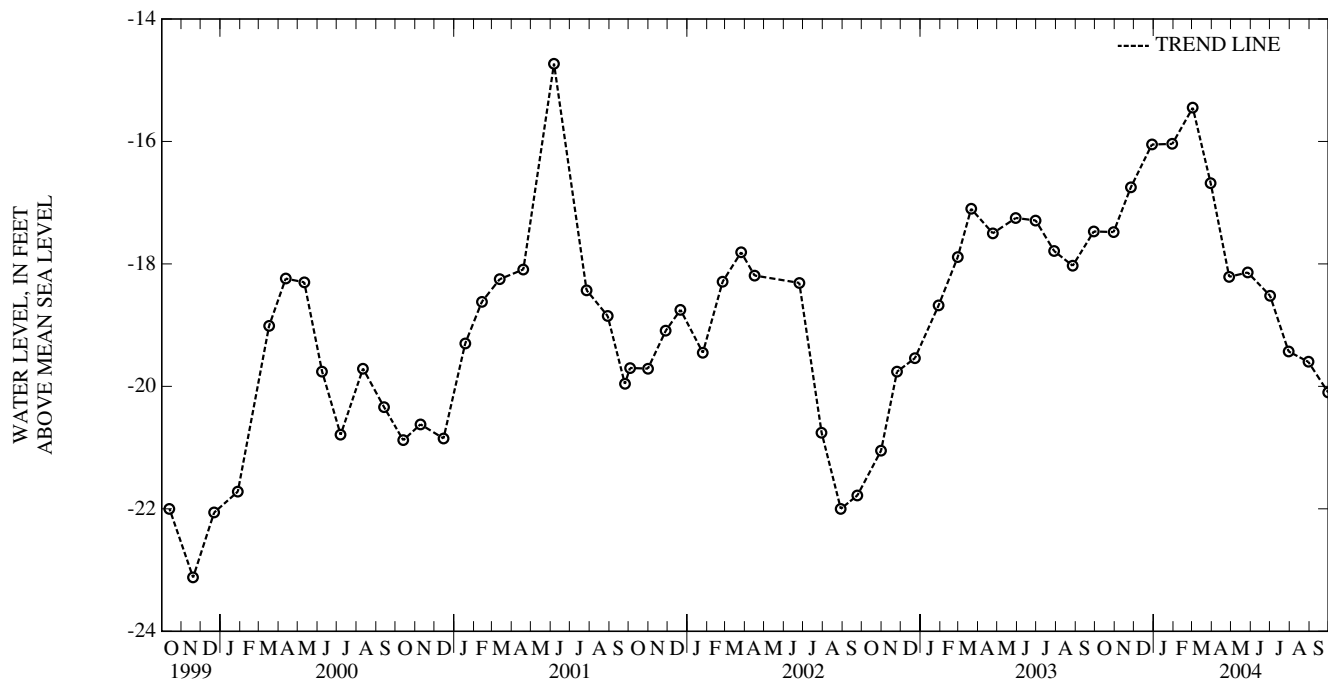
PERIOD OF RECORD.-- September 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.92 ft above sea level, September 6, 1979; lowest measured, 23.93 ft below sea level, August 9, 1999 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	-17.48	JAN 30, 2004	-16.04	APR 28, 2004	-18.21	JUL 30, 2004	-19.43
NOV 26	-16.75	MAR 02	-15.45	MAY 27	-18.14	AUG 30	-19.60
DEC 29	-16.05	30	-16.68	JUL 01	-18.52	SEP 30	-20.10

LOWEST -20.10 SEP 30, 2004
 HIGHEST -15.45 MAR 02, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cg 24. SITE ID.--390123076241603 PERMIT NUMBER.--AA-73-8960.

LOCATION.--Lat 39°01'23", long 76°24'16", Hydrologic Unit 02060004, 1500 ft northeast of Oceanic Dr. and South Beach Rd., at Sandy Point State Park.
Owner: U.S. Geological Survey

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 664 ft; casing diameter 6 in., to 158 ft; casing diameter 4 in., 158 to 605 ft, 615 to 648 ft, and 658 to 664 ft; screen diameter 4 in., from 605 to 615 ft, and 648 to 658 ft.

INSTRUMENTATION.-- Monthly water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 12.68 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 3.16 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

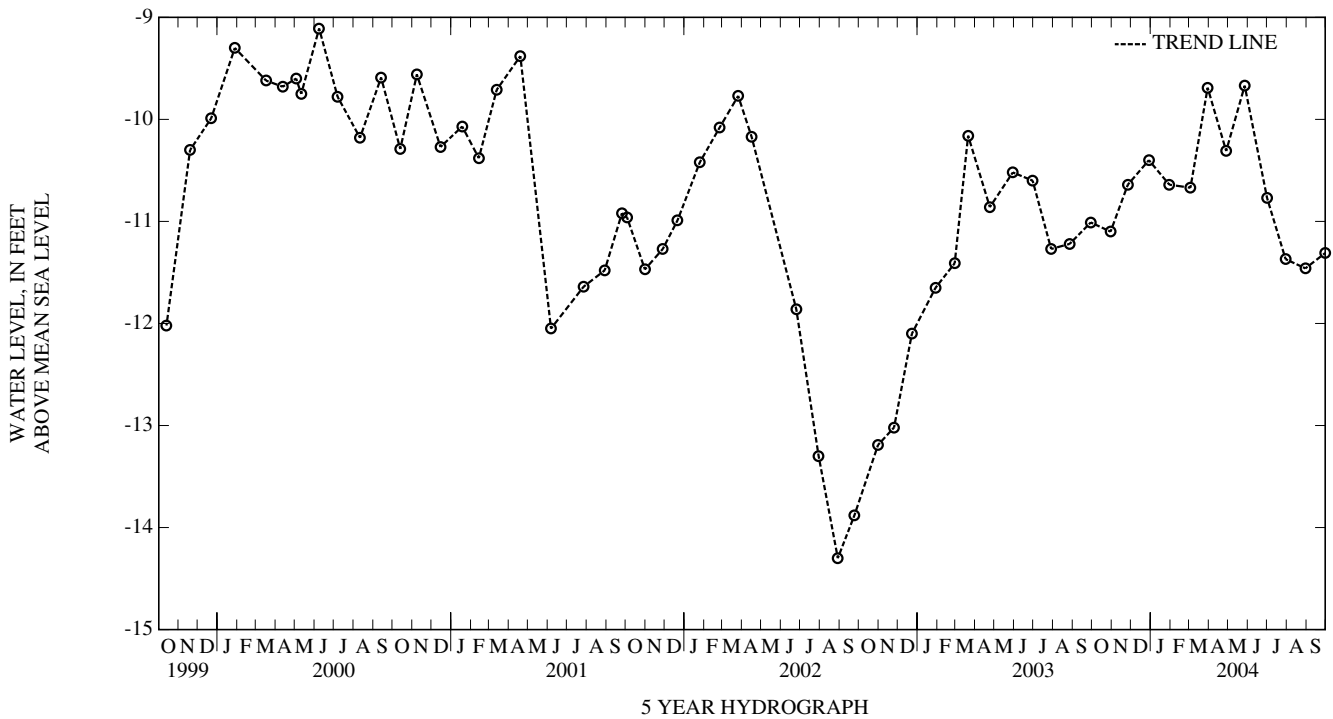
PERIOD OF RECORD.-- September 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.21 ft above sea level, August 15, 1980; lowest measured, 14.30 ft below sea level, August 29, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	-11.10	JAN 30, 2004	-10.64	APR 28, 2004	-10.31	JUL 30, 2004	-11.37
NOV 26	-10.64	MAR 03	-10.67	MAY 27	-9.67	AUG 30	-11.46
DEC 29	-10.40	30	-9.69	JUL 01	-10.77	SEP 30	-11.31

LOWEST -11.46 AUG 30, 2004
HIGHEST -9.67 MAY 27, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cg 25. SITE ID.--390127076240301. PERMIT NUMBER.--AA-74-1240.

LOCATION.--Lat 39°01'27", long 76°24'03", Hydrologic Unit 02060004, at Sandy Point State Park, near maintenance area. Owner: Maryland Department of Natural Resources.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 107 ft; casing diameter 3 in., to 100 ft; screen diameter 3 in., from 100 to 107 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 17.33 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.43 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

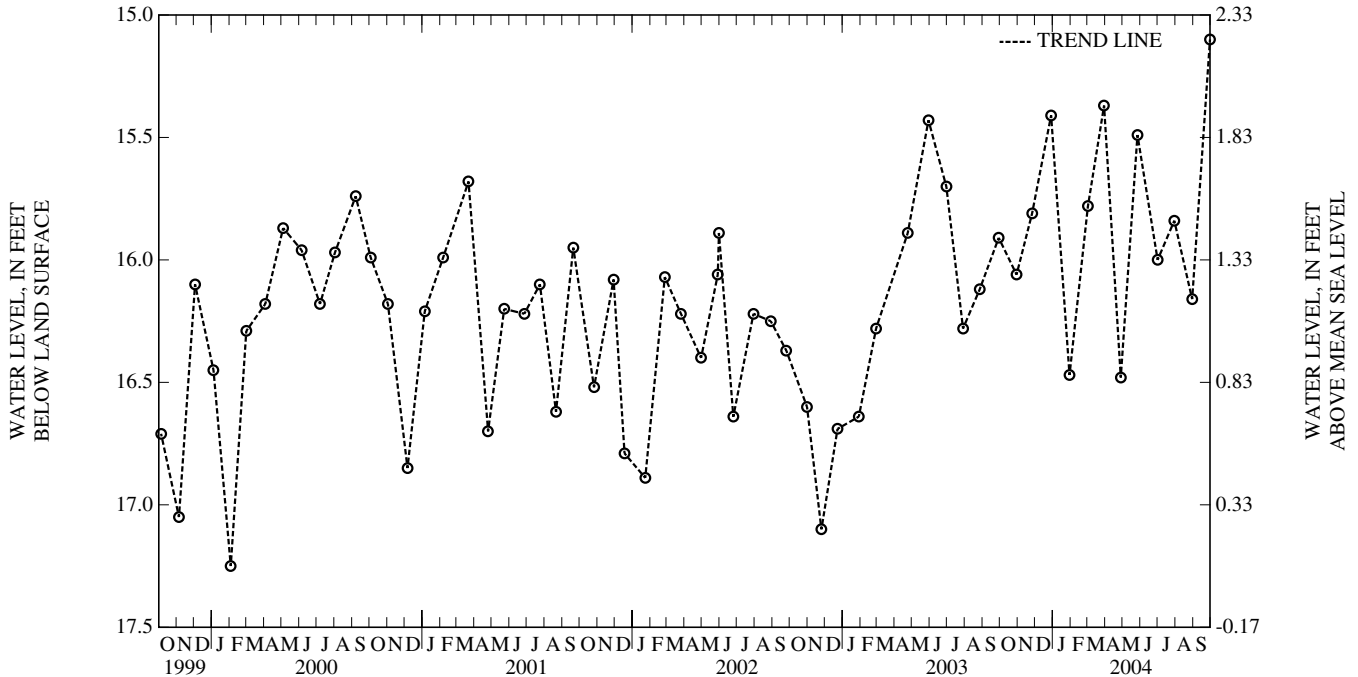
PERIOD OF RECORD.--April 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured,14.74 ft below land surface, April 13, 1988; lowest measured, 18.25 ft below land surface, October 1, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	16.06	JAN 30, 2004	16.47	APR 28, 2004	16.48	JUL 30, 2004	15.84
NOV 26	15.81	MAR 02	15.78	MAY 27	15.49	AUG 30	16.16
DEC 29	15.41	30	15.37	JUL 01	16.0	SEP 30	15.10

HIGHEST 15.10 SEP 30, 2004
 LOWEST 16.48 APR 28, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Dd 42. SITE ID.--385808076373502. PERMIT NUMBER.--AA-71-0231.

LOCATION.--Lat 38°58'10", long 76°37'35", Hydrologic Unit 02060004, 30 ft south of MD Rt 50, 0.5 mi from intersection with Howard Grove Rd. and Rutland Rd. Owner: U.S. Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 275 ft; casing diameter 4 in., to 190 ft; casing diameter 2 in., from 200 to 225 ft, and 235 to 265 ft. screen diameter 2 in., from 190 to 200 ft., 225 to 235 ft, and 265 to 275 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with graphic water-level recorder from December 1971 to August 1975 and with a digital water-level recorder--30-minute recorder interval from August 1975 to May 1992.

DATUM.--Elevation of land surface is 105.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 0.72 ft above land surface.

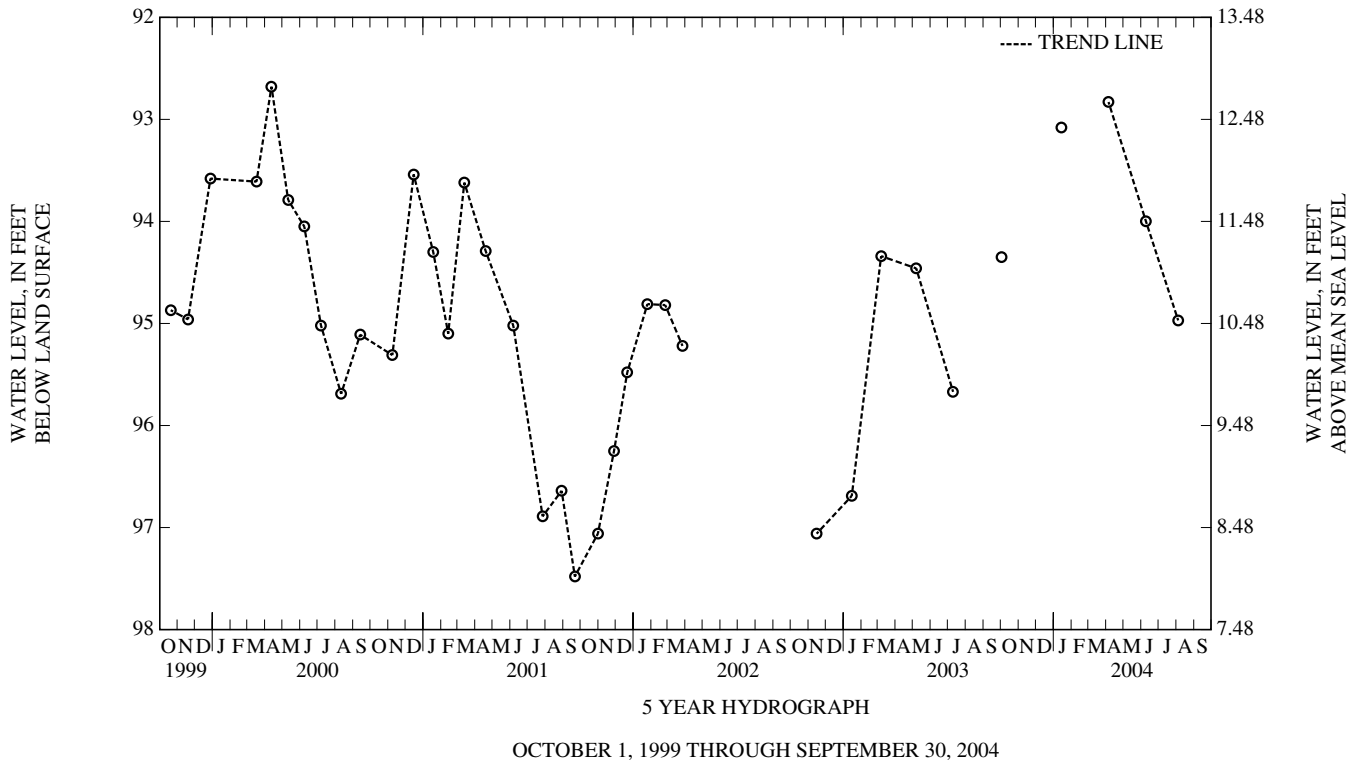
REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network. Water levels are affected by local ground-water withdrawal. Water-level measurements could not be taken from April to October 2002.

PERIOD OF RECORD.--October 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 80.25 ft below land surface May 4, 1973. lowest measured, 103.85 ft below land surface, February 26, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	94.35	APR 05, 2004	92.83	AUG 04, 2004	94.97
JAN 14, 2004	93.08	JUN 09	94.00		
HIGHEST 92.83 APR 05, 2004					
LOWEST 94.97 AUG 04, 2004					



ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA De 1. SITE ID.--385915076340401.

LOCATION.--Lat 38°59'15", long 76°34'03", Hydrologic Unit 02060004, 0.07 mi north of MD Rt. 450, 1.1 mi west of Generals Highway. Owner: City of Annapolis.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 237 ft; casing diameter 10 in., to 207 ft; screen diameter 6 in., from 207 to 237 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with graphic water-level recorder from May 1969 to December 1977 and with a digital water-level recorder--15-minute recorder interval from December 1977 to September 1996.

DATUM.--Elevation of land surface is 13.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.00 ft above land surface.

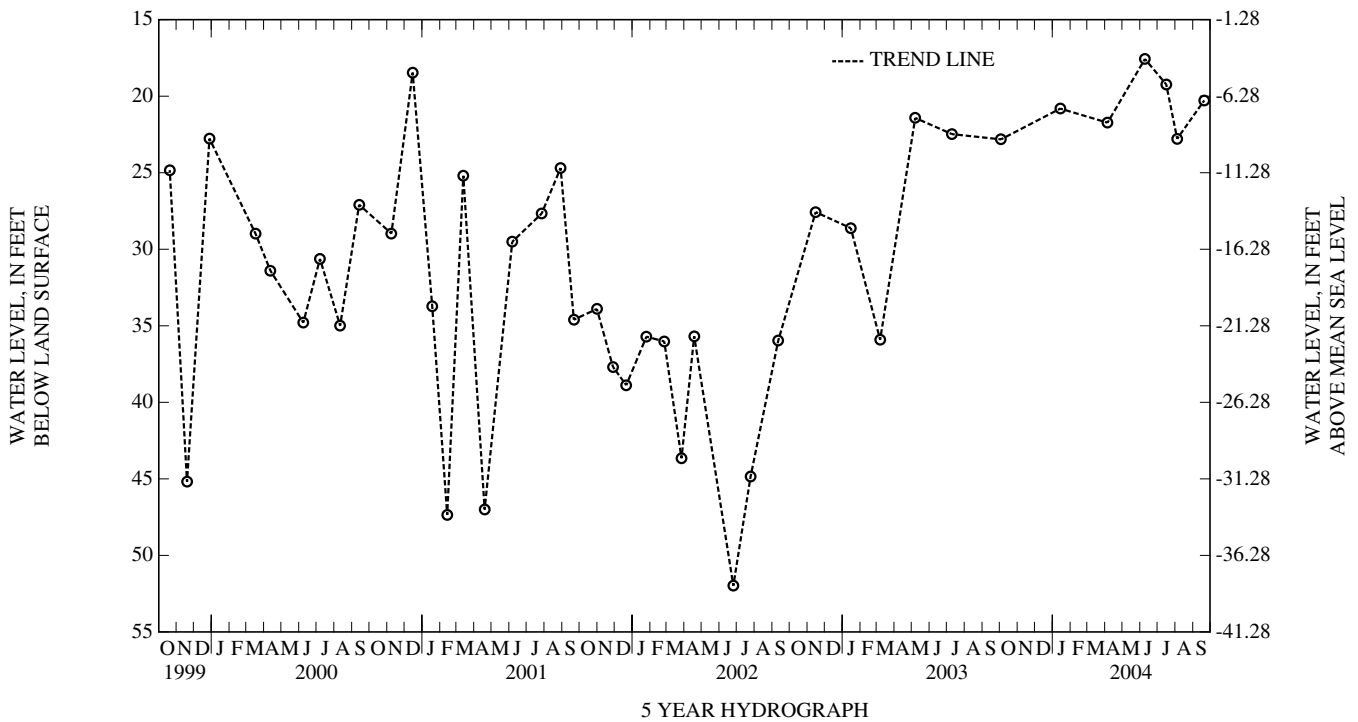
REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--May 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.25 ft below land surface, November 14, 1988 (recorder); lowest measured, 52.90 ft below land surface, May 18, 1997.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 2003	22.82	APR 05, 2004	21.73	JUL 16, 2004	19.23	SEP 20, 2004	20.28
JAN 14, 2004	20.81	JUN 09	17.57	AUG 04	22.78		
HIGHEST 17.57 JUN 09, 2004							
LOWEST 22.82 OCT 03, 2003							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Df 19. SITE ID.--385921076270701.

LOCATION.--Lat 38°59'22", long 76°27'04", Hydrologic Unit 02060004, 200 ft east of intersection with McLean and Hooper Rd. Owner: U.S. Navy.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 590 ft; casing diameter 10 in., to 151.6 ft; casing diameter 8 in., from 151.6 to 464.3 ft, and casing diameter 6 in., from 0 to 565 ft; screen diameter 10 in., from 565 to 590 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with graphic water-level recorder from November 1979 to April 1980.

DATUM.--Elevation of land surface is 15.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 2.5 ft above land surface.

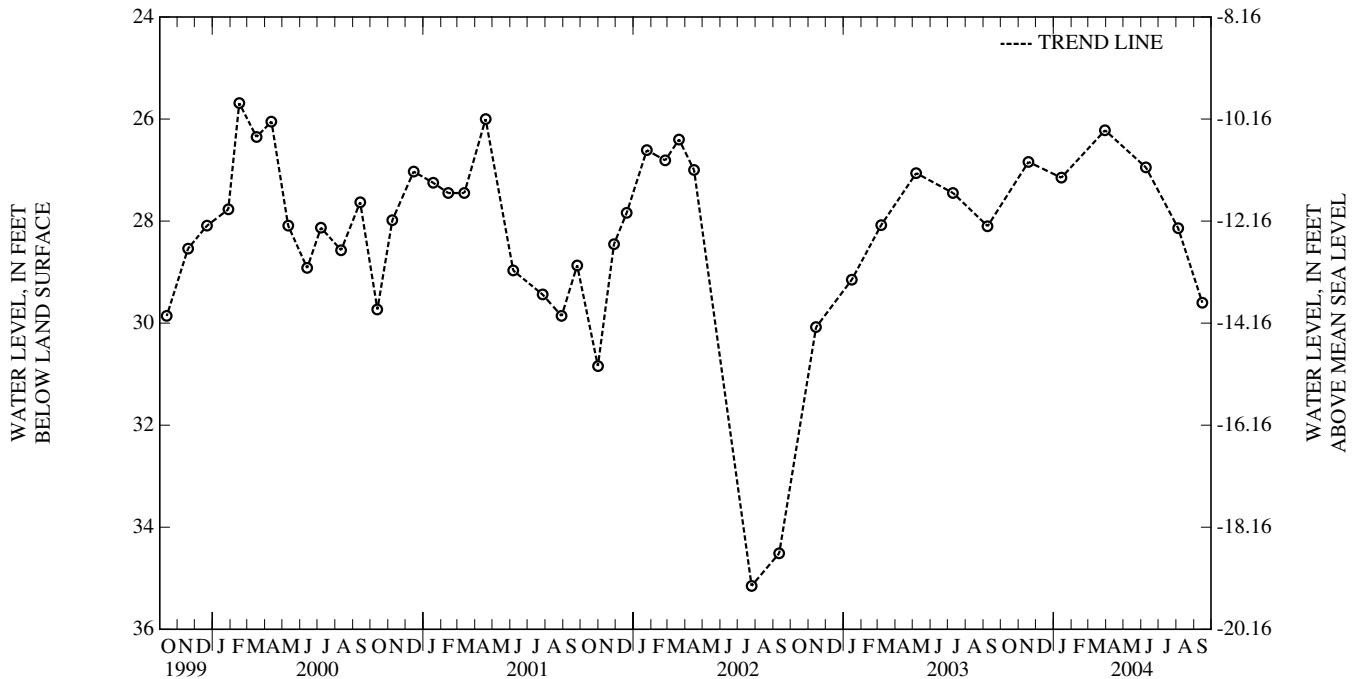
REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--March 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.34 ft below land surface, March 9, 1977; lowest measured, 35.92 ft below land surface, August 6, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18, 2003	26.84	MAR 30, 2004	26.22	AUG 04, 2004	28.14
JAN 14, 2004	27.15	JUN 09	26.95	SEP 15	29.60
HIGHEST 26.22 MAR 30, 2004					
LOWEST 29.60 SEP 15, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Df 20. SITE ID.--385916076270702.

LOCATION.--Lat 38°59'16", long 76°27'07", Hydrologic Unit 02060004, off Hooper Rd., 400 ft from McLean Rd. Owner: U.S. Navy.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 255 ft; casing diameter 10 in., to 150 ft; casing diameter 8 in., from 135 to 233 ft; screen diameter 8 in., from 229.4 to 255 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with graphic water-level recorder from June 1969 to December 1977. Equipped with digital water-level recorder--30-minute recorder interval from December 1977 to current year.

DATUM.--Elevation of land surface is 21.87 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 3.0 ft above land surface.

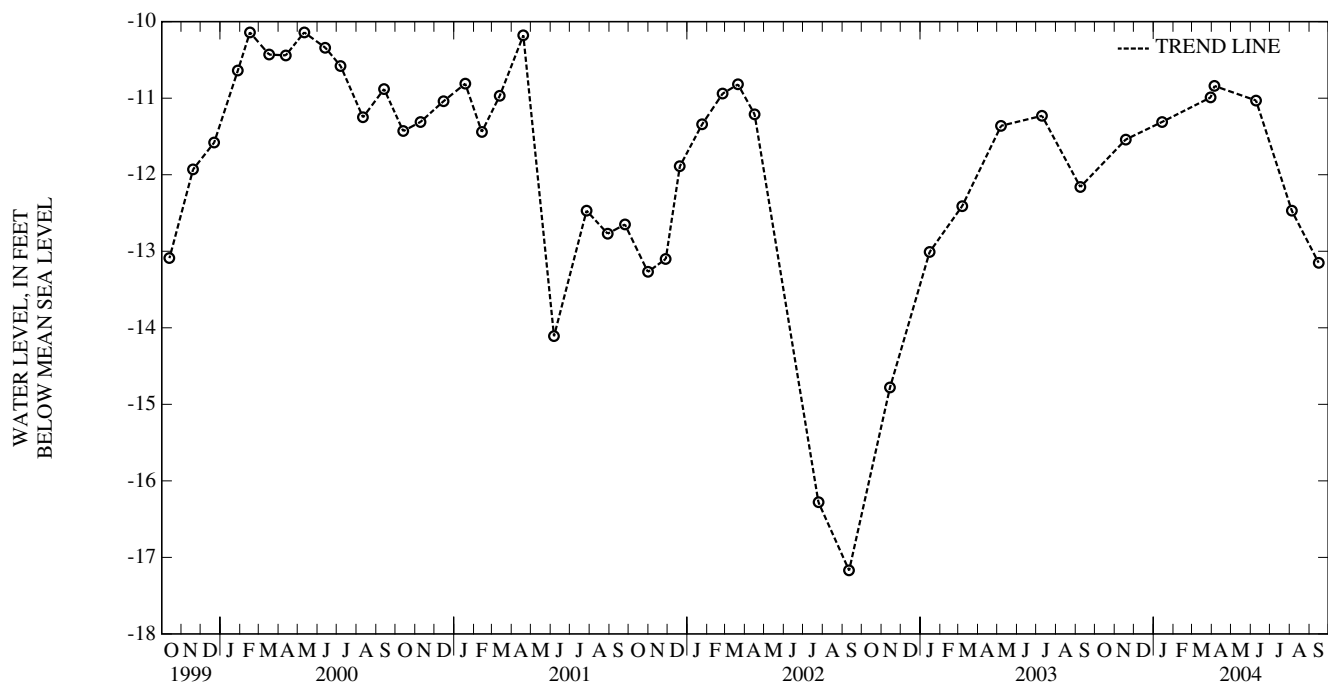
REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--June 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.52 ft above sea level, April 25, 1972; lowest measured, 17.80 ft below sea level, August 31, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18, 2003	-11.54	MAR 30, 2004	-10.99	JUN 09, 2004	-11.03	SEP 15, 2004	-13.15
JAN 14, 2004	-11.31	APR 05	-10.84	AUG 04	-12.47		
		LOWEST	-13.15	SEP 15, 2004			
		HIGHEST	-10.84	APR 05, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

Daily Low Water Levels

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Df 79. SITE ID.--385905076293601. PERMIT NUMBER.--AA-03-7867.

LOCATION.--Lat 38°59'05", long 76°29'36", Hydrologic Unit 02060004, off Dorsy Creek Rd., 500 ft north of MD Rt. 450. Owner: U.S.Navy.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 695 ft; casing diameter 6 in., to 300 ft; 320 to 572 ft, and 592 to 675 ft; screen diameter 6 in., from 300 to 320 ft, 572 to 592 ft, and 675 to 695 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with graphic water-level recorder from May 1969 to December 1977. Equipped with digital water-level recorder--60-minute recorder interval from December 1977 to January 2003.

DATUM.--Elevation of land surface is 5.17 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.8 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

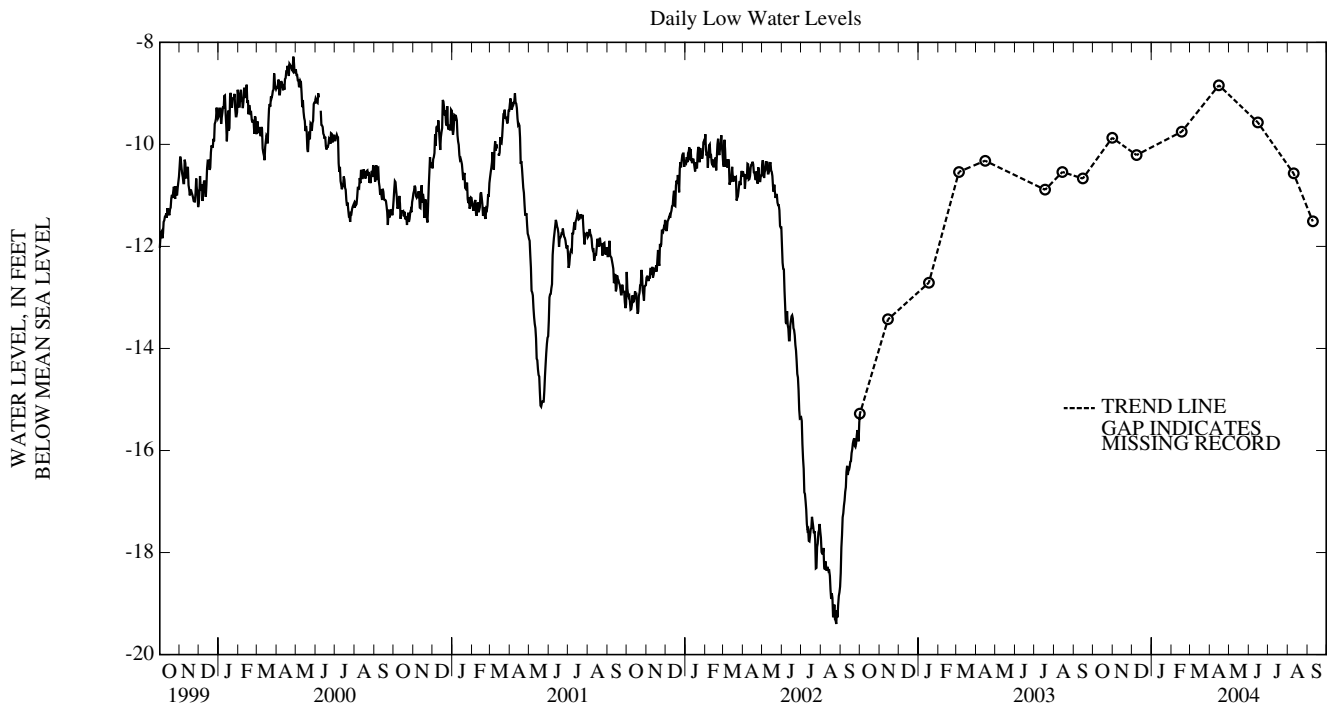
PERIOD OF RECORD.--May 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.65 ft above sea level, February 20, 1974 (recorder); lowest measured, 19.40 ft below sea level, August 25, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	-9.87	FEB 17, 2004	-9.75	JUN 15, 2004	-9.57	SEP 09, 2004	-11.51
DEC 08	-10.21	APR 15	-8.84	AUG 10	-10.57		

LOWEST -11.51 SEP 09, 2004
 HIGHEST -8.84 APR 15, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Df 103. SITE ID.--385623076274401. PERMIT NUMBER.--AA-73-3315.

LOCATION.--Lat 38°56'23", long 76°27'44", Hydrologic Unit 02060004, off West Lake Dr., 900 ft north of intersection with Farragut Rd. Owner: Private Residence.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 46 ft; casing diameter 4 in., to 39 ft; screen diameter 2 in., from 39 to 46 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 26.51 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.57 ft above land surface.

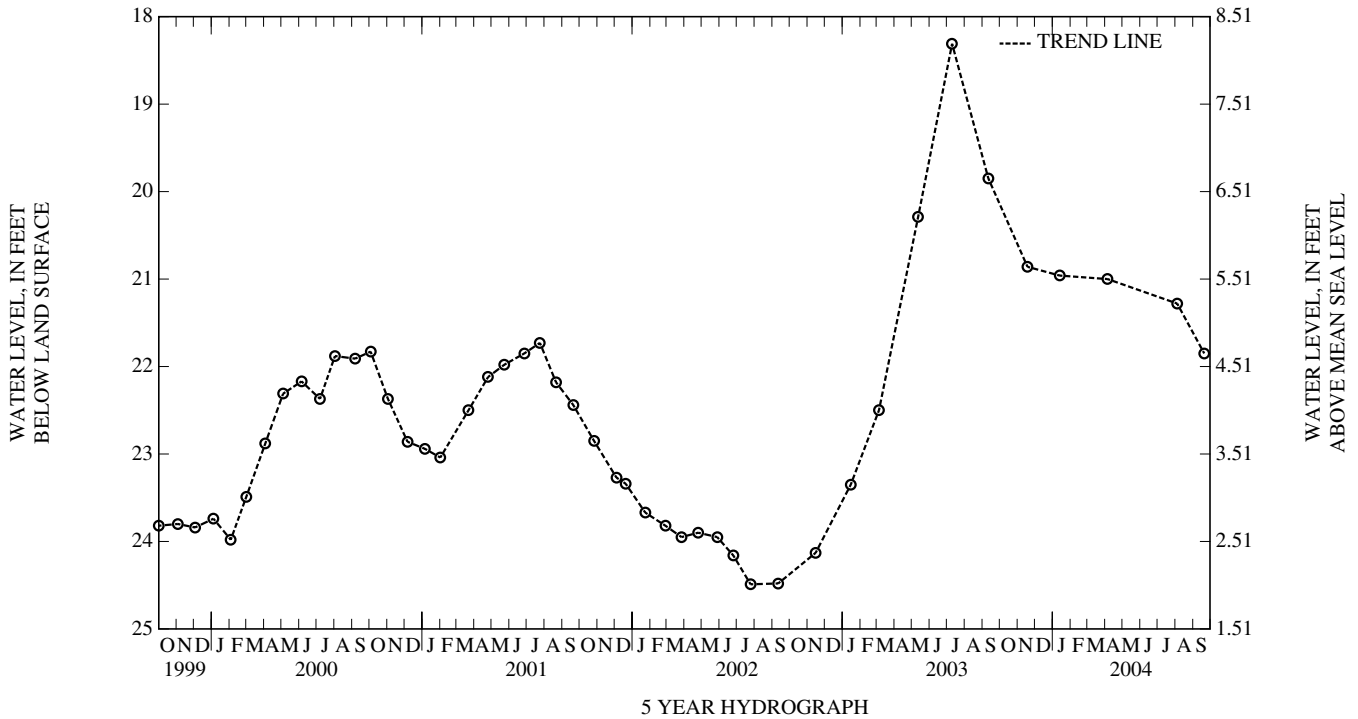
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--May 1987, January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.31 ft below land surface, July 10, 2003; lowest measured, 25.39 ft below land surface, April 9, 1990.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18, 2003	20.86	APR 05, 2004	21.00	SEP 20, 2004	21.85
JAN 13, 2004	20.96	AUG 04	21.28		
HIGHEST 20.86 NOV 18, 2003					
LOWEST 21.85 SEP 20, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ed 45. SITE ID.--385406076383901. PERMIT NUMBER.--AA-74-1005.

LOCATION.--Lat 38°54'06", long 76°38'39", Hydrologic Unit 02060006, at Anne Arundel County Police Academy, near Davidsonville. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 157 ft; casing diameter 4 in., to 147 ft; screen diameter 2 in., from 147 to 157 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.87 ft above land surface.

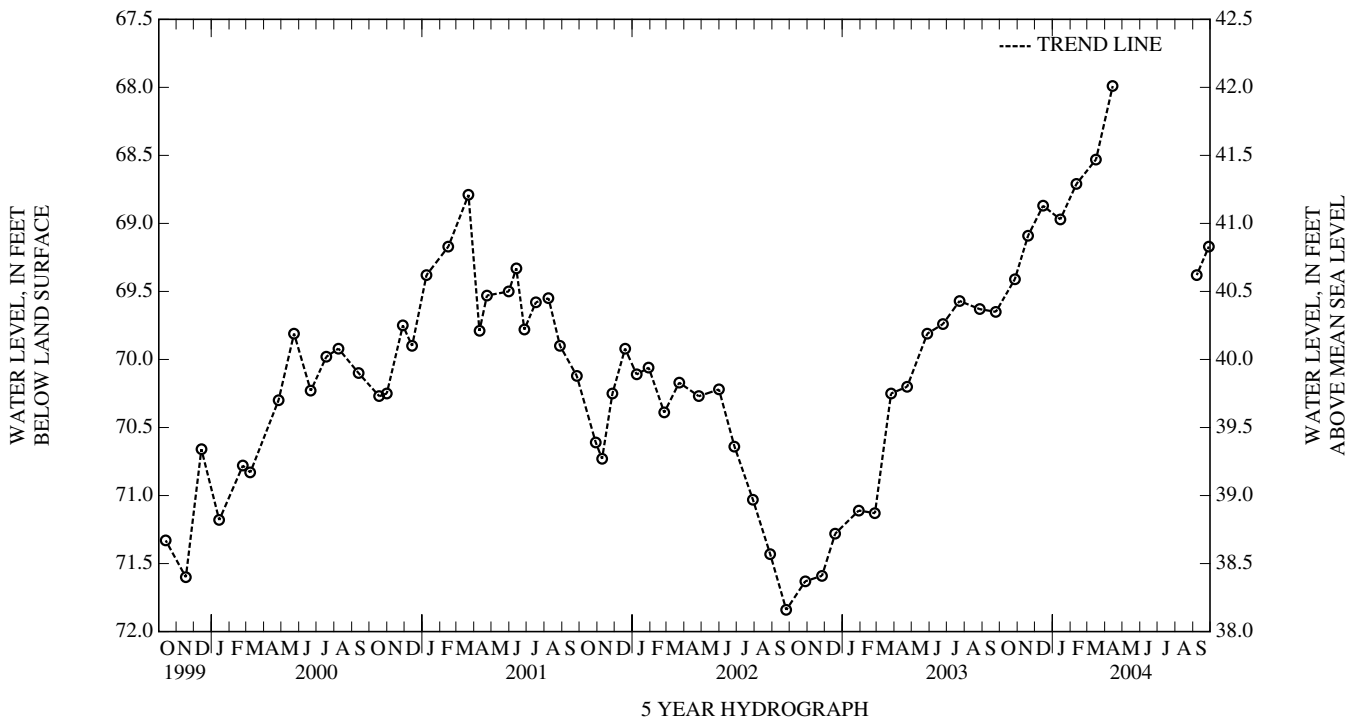
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.51 ft below land surface, May 6, 1980; lowest measured, 71.84 ft below land surface, September 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	69.41	JAN 14, 2004	68.97	APR 14, 2004	67.99
NOV 19	69.09	FEB 11	68.71	SEP 07	69.38
DEC 15	68.87	MAR 16	68.53	28	69.17
HIGHEST 67.99		APR 14, 2004			
LOWEST 69.41		OCT 27, 2003			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ed 65. SITE ID.--385406076383902. PERMIT NUMBER.--AA-94-5387.

LOCATION.--Lat 38°54'06", long 76°38'39", Hydrologic Unit 02060006, at Anne Arundel County Police Academy, near Davidsonville. Owner: Maryland Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 310 ft; casing diameter 4.5 in., to 285 ft, and 305 to 310 ft; screen diameter 4.5 in., from 285 to 305 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.60 ft above land surface.

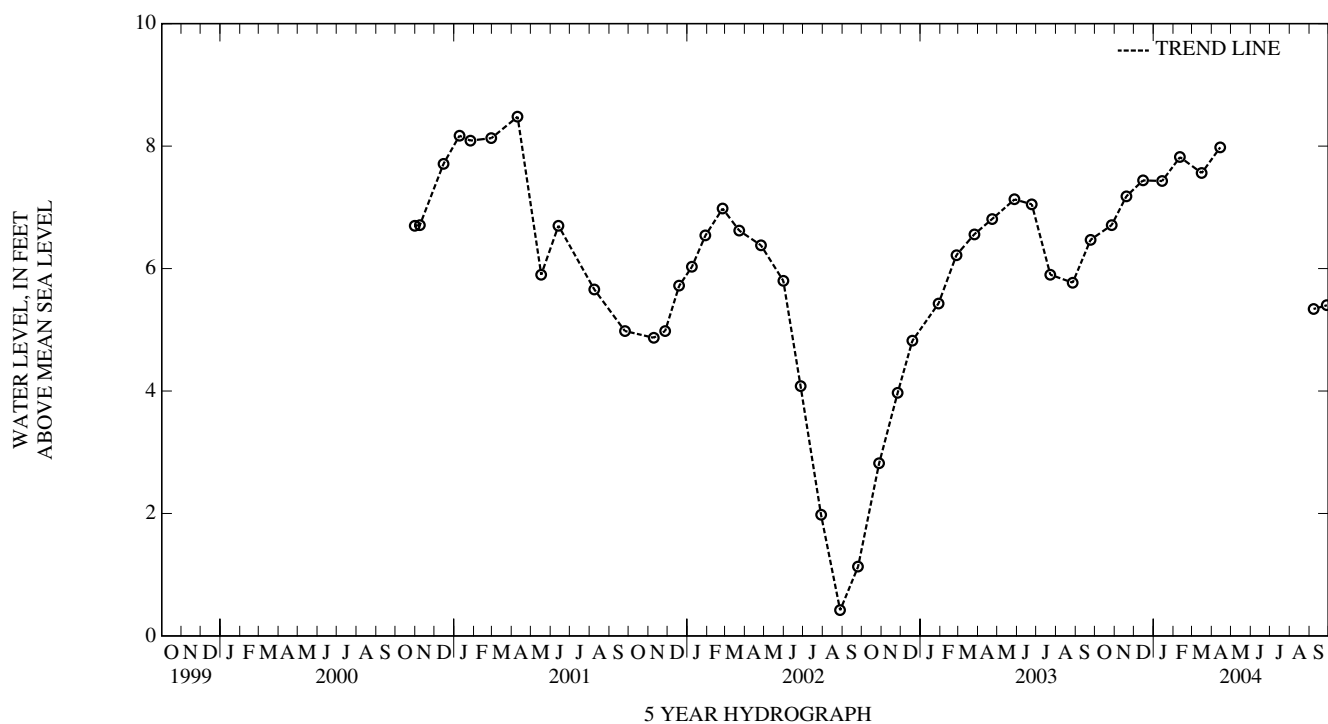
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.48 ft above sea level, April 10, 2001; lowest measured, 0.42 ft above sea level, August 28, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	6.71	JAN 14, 2004	7.43	APR 14, 2004	7.98
NOV 19	7.18	FEB 11	7.82	SEP 07	5.34
DEC 15	7.44	MAR 16	7.56	28	5.40
LOWEST	5.34	SEP 07, 2004			
HIGHEST	7.98	APR 14, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Fe 92. SITE ID.--384644076331201. PERMIT NUMBER.--AA-94-5386.

LOCATION.--Lat 38°46'44", long 76°33'12", Hydrologic Unit 02060004, at Deale. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 205 ft; casing diameter 4.5 in., to 170 ft, and 200 to 205 ft; screen diameter 4.5 in., from 170 to 200 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with a digital water-level recorder with a 30-minute recording interval from September 2000 to November 2004.

DATUM.--Elevation of land surface is 9 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 3.00 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--August 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.88 ft below sea level, March 22, 2001 (recorder); lowest measured, 36.20 ft below sea level, August 20, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

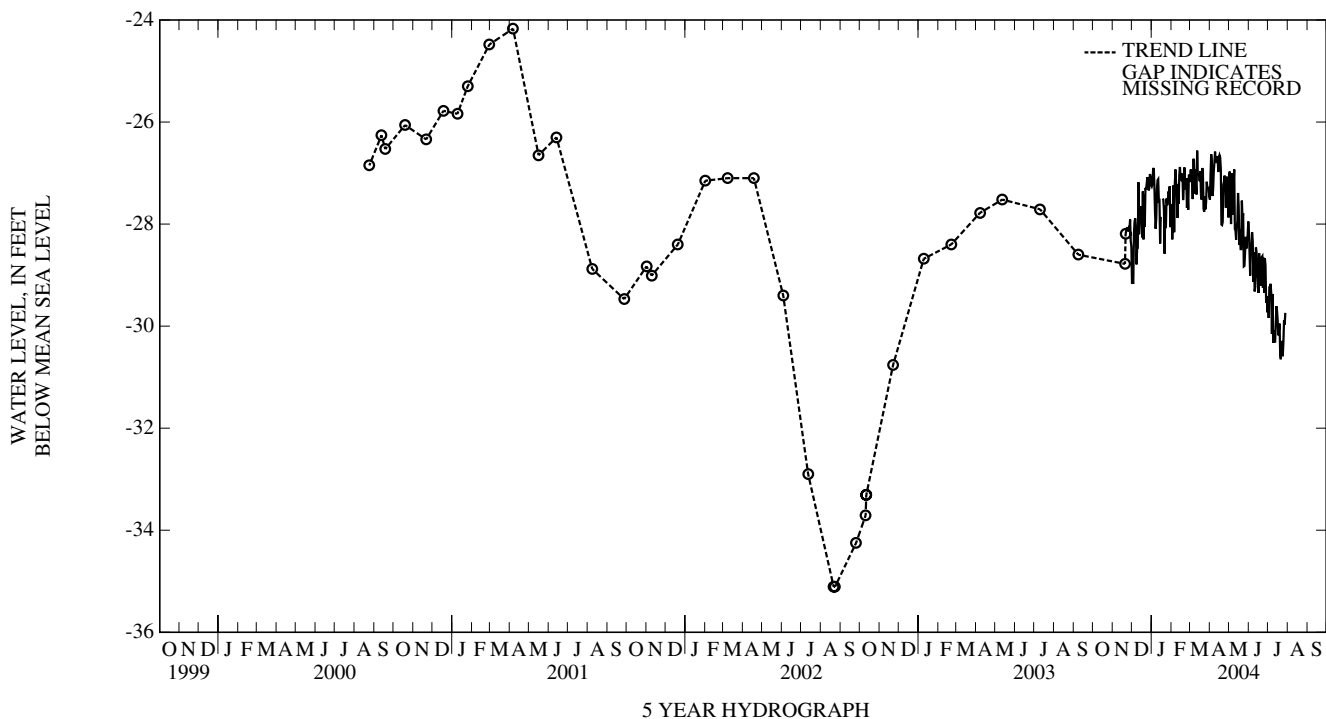
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20, 2003	-28.78	MAR 29, 2004	-26.61	JUL 29, 2004	-29.45
JAN 13, 2004	-27.83	JUN 04	-28.32	SEP 24	-30.54
LOWEST -30.54		SEP 24, 2004			
HIGHEST -26.61		MAR 29, 2004			

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	---	---	---	---	-28.32	-29.17	-27.02	-27.26	-27.47	-27.61	-26.93	-27.17
2	---	---	---	---	-28.30	-29.13	-26.93	-27.21	-27.26	-28.30	-26.76	-26.93
3	---	---	---	---	-28.19	-29.17	-26.77	-26.93	-26.90	-27.79	-26.88	-27.18
4	---	---	---	---	-27.93	-28.19	-26.71	-26.90	-26.89	-27.24	-26.78	-27.05
5	---	---	---	---	-27.74	-27.95	-26.71	-27.22	-27.10	-28.16	-26.61	-27.51
6	---	---	---	---	-27.70	-27.89	-26.76	-27.76	-26.77	-27.22	-26.39	-26.72
7	---	---	---	---	-27.79	-28.08	-26.89	-28.09	-26.66	-26.93	-26.61	-26.75
8	---	---	---	---	-27.93	-28.79	-27.06	-27.88	-26.86	-27.21	-26.60	-27.41
9	---	---	---	---	-27.54	-28.49	-26.95	-27.32	-26.99	-27.24	-26.65	-26.93
10	---	---	---	---	-27.18	-28.47	-26.96	-27.14	-26.91	-27.88	-26.48	-27.21
11	---	---	---	---	-26.78	-27.18	-26.93	-27.12	-26.84	-27.22	-26.36	-27.42
12	---	---	---	---	-27.17	-28.20	-26.81	-27.55	-26.79	-27.60	-26.18	-26.56
13	---	---	---	---	-27.43	-27.86	-27.18	-27.54	-26.74	-27.04	-26.56	-27.02
14	---	---	---	---	-26.97	-27.65	-27.14	-28.38	-26.71	-26.88	-26.90	-27.03
15	---	---	---	---	-26.94	-27.79	-27.03	-27.86	-26.87	-27.10	-26.81	-27.03
16	---	---	---	---	-27.28	-27.91	---	---	-26.91	-27.05	-26.82	-27.16
17	---	---	---	---	-27.26	-28.26	---	---	-26.84	-27.16	-26.72	-26.96
18	---	---	---	---	-27.11	-27.36	-27.04	-27.50	-26.76	-27.01	-26.56	-27.44
19	---	---	---	---	-27.06	-28.30	-27.25	-27.52	-26.70	-27.53	-26.38	-27.52
20	---	---	---	---	-27.20	-27.42	-27.34	-27.73	-26.54	-27.28	-26.50	-26.90
21	---	---	-27.91	-28.19	-27.26	-28.05	-27.51	-28.58	-26.38	-26.89	-26.29	-27.01
22	---	---	-27.88	-28.13	-27.05	-27.29	-27.24	-27.63	-26.77	-27.12	-26.95	-27.70
23	---	---	-27.90	-28.12	-27.19	-27.32	-27.36	-28.08	-27.03	-27.33	-26.97	-27.76
24	---	---	-27.72	-28.06	-26.97	-27.21	-27.16	-27.50	-26.75	-27.10	-26.81	-27.46
25	---	---	-27.90	-28.14	-26.93	-27.08	-27.48	-27.63	-26.80	-27.68	-26.91	-27.71
26	---	---	-27.93	-28.08	-26.91	-27.14	-27.36	-27.58	-26.88	-27.34	-26.89	-27.57
27	---	---	-27.88	-28.10	-27.10	-27.34	-27.05	-27.36	-26.77	-27.72	-26.86	-27.17
28	---	---	-27.63	-27.91	-27.02	-27.30	-27.02	-27.41	-26.89	-27.03	-27.10	-27.30
29	---	---	-27.64	-28.33	-26.82	-27.02	-27.14	-27.26	-26.92	-27.06	-26.65	-27.29
30	---	---	-28.24	-28.44	-26.75	-27.06	-27.12	-28.06	---	---	-26.57	-27.29
31	---	---	---	---	-27.04	-27.23	-27.30	-27.64	---	---	-26.55	-27.46
MONTH	---	---	-27.63	-28.44	-26.75	-29.17	-26.71	-28.58	-26.38	-28.30	-26.18	-27.76

ANNE ARUNDEL COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-26.52	-27.52	-26.76	-27.04	-27.75	-28.15	-28.61	-29.52	---	---	---	---
2	-26.47	-27.01	-26.77	-26.97	-27.69	-28.57	-28.62	-29.84	---	---	---	---
3	-26.43	-26.63	-26.71	-27.18	-27.79	-29.01	-28.76	-29.24	---	---	---	---
4	-26.31	-26.78	-26.86	-28.00	-28.09	-28.51	-28.85	-29.24	---	---	---	---
5	-26.78	-27.45	-26.66	-27.00	-27.88	-28.43	-28.80	-29.17	---	---	---	---
6	-26.89	-27.32	-26.64	-27.23	-27.91	-28.16	-29.08	-29.37	---	---	---	---
7	-26.66	-26.97	-26.64	-27.82	-27.99	-28.33	-29.07	-30.15	---	---	---	---
8	-26.57	-26.79	-26.81	-27.25	-28.01	-29.13	-29.02	-29.37	---	---	---	---
9	-26.44	-26.58	-26.69	-26.93	-28.08	-28.55	-29.15	-30.33	---	---	---	---
10	-26.49	-26.76	-26.83	-28.10	-28.18	-29.32	-29.41	-30.09	---	---	---	---
11	-26.65	-26.78	-27.01	-28.12	-28.16	-29.23	-29.66	-30.28	---	---	---	---
12	-26.41	-26.77	-26.99	-28.31	-27.97	-28.46	-29.61	-30.32	---	---	---	---
13	-26.08	-26.67	-27.08	-28.07	-28.02	-28.55	-29.42	-29.95	---	---	---	---
14	-25.99	-26.98	-26.97	-27.93	-28.03	-28.88	-29.22	-29.61	---	---	---	---
15	-26.27	-26.70	-26.96	-27.39	-28.05	-29.08	-29.13	-29.70	---	---	---	---
16	-26.45	-26.65	-27.19	-27.65	-28.17	-29.35	-29.45	-29.87	---	---	---	---
17	-26.29	-26.69	-27.41	-28.41	-28.20	-28.57	-29.48	-30.18	---	---	---	---
18	-26.50	-26.92	-27.20	-28.10	-28.05	-29.02	-29.57	-30.09	---	---	---	---
19	-26.74	-28.01	-27.09	-28.49	-28.10	-29.21	-29.51	-29.95	---	---	---	---
20	-26.74	-28.02	-27.31	-28.49	-28.37	-28.66	-29.50	-30.57	---	---	---	---
21	-26.85	-27.96	-27.11	-27.54	-28.40	-28.65	-29.57	-30.65	---	---	---	---
22	-26.63	-27.23	-27.16	-27.91	-28.22	-28.63	-29.61	-30.31	---	---	---	---
23	-26.80	-27.17	-27.37	-27.79	-28.43	-29.25	-29.54	-30.31	---	---	---	---
24	-26.78	-27.05	-27.66	-28.83	-28.35	-28.66	-29.52	-30.59	---	---	---	---
25	-26.84	-27.18	-27.71	-28.82	-28.32	-29.35	-29.72	-30.31	---	---	---	---
26	-26.59	-27.68	-27.51	-28.56	-28.20	-28.67	-29.63	-29.89	---	---	---	---
27	-26.65	-27.07	-27.44	-28.25	-28.53	-28.81	-29.42	-29.97	---	---	---	---
28	-26.67	-27.17	-27.43	-28.48	-28.51	-29.54	-29.27	-29.74	---	---	---	---
29	-26.67	-27.42	-27.56	-28.30	-28.58	-29.41	---	---	---	---	---	---
30	-26.67	-27.87	-27.85	-28.23	-28.65	-29.73	---	---	---	---	---	---
31	---	---	-27.67	-27.95	---	---	---	---	---	---	---	---
MONTH	-25.99	-28.02	-26.64	-28.83	-27.69	-29.73	-28.61	-30.65	---	---	---	---
YEAR	-25.99	-30.65										

Daily Low Water Levels



ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Fe 93. SITE ID.--384644076331202. PERMIT NUMBER.--AA-94-5391.

LOCATION.--Lat 38°46'44", long 76°33'12", Hydrologic Unit 02060004, at Deale. Owner: Maryland Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 470 ft; casing diameter 4.5 in., to 429 ft, 449 to 454 ft, and 464 to 470 ft; screen diameter 4.5 in., from 429 to 449 ft, and 454 to 464 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with a digital water-level recorder with a 30-minute recording interval from September 2000 to November 2004.

DATUM.--Elevation of land surface is 9 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 3.35 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--September 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.55 ft below sea level, March 22, 2001 (recorder); lowest measured, 14.47 ft below sea level, October 16, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

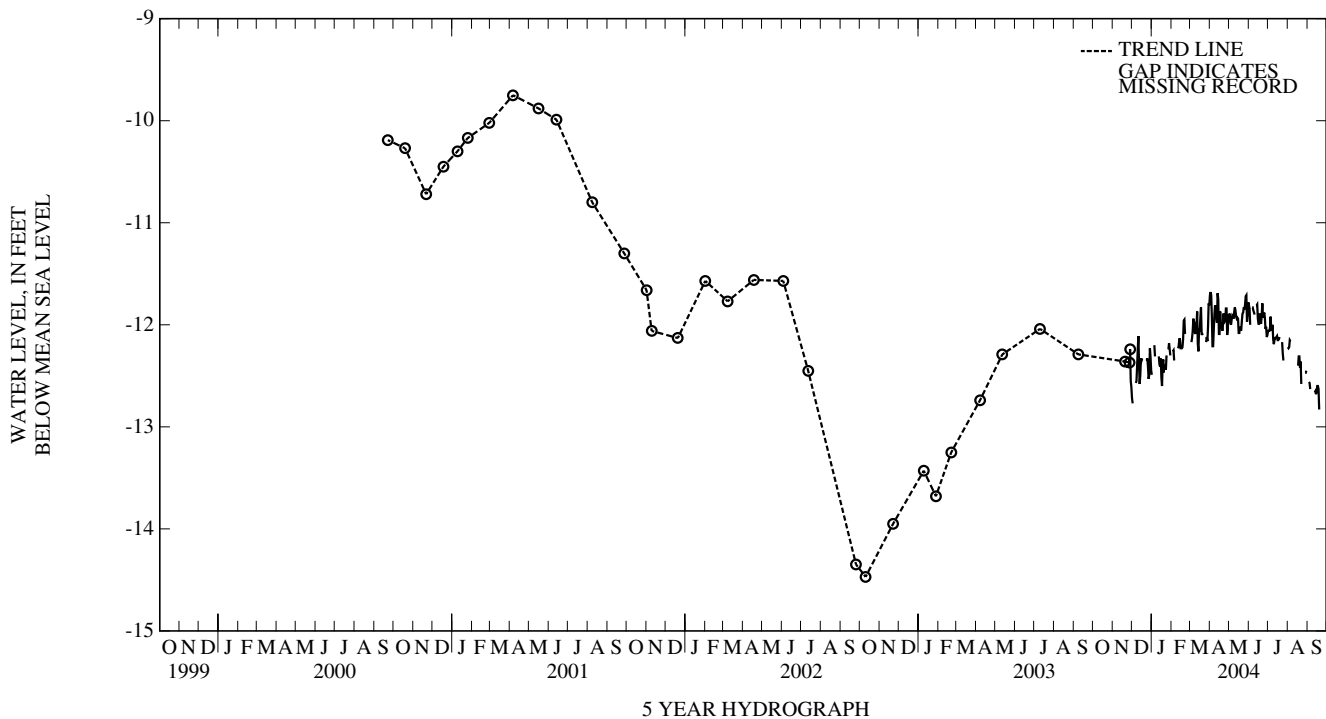
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20, 2003	-12.36	MAR 30, 2004	-11.79	JUL 29, 2004	-12.22
JAN 13, 2004	-12.30	JUN 04	-11.95	SEP 24	-12.59
LOWEST -12.59 SEP 24, 2004					
HIGHEST -11.79 MAR 30, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	-12.58	-12.72	-12.28	-12.49	---	---	---	---
2	---	---	---	---	-12.69	-12.77	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	-11.95	-12.26	-11.98	-12.17
4	---	---	---	---	---	---	---	---	-11.96	-12.25	-12.00	-12.13
5	---	---	---	---	---	---	-12.10	-12.20	-12.25	-12.35	-11.87	-12.06
6	---	---	---	---	---	---	-12.15	-12.31	---	---	-11.75	-11.94
7	---	---	---	---	-12.43	-12.57	---	---	---	---	-11.88	-12.03
8	---	---	---	---	-12.39	-12.55	---	---	---	---	-11.91	-12.07
9	---	---	---	---	-12.19	-12.40	-12.38	-12.46	---	---	-11.86	-12.09
10	---	---	---	---	-11.99	-12.24	---	---	---	---	-11.87	-12.00
11	---	---	---	---	-11.73	-12.11	---	---	-12.15	-12.23	-11.69	-12.01
12	---	---	---	---	-12.11	-12.39	-12.10	-12.31	-12.11	-12.21	-11.60	-11.87
13	---	---	---	---	-12.39	-12.58	-12.26	-12.39	-12.09	-12.14	-11.87	-12.19
14	---	---	---	---	-11.93	-12.49	-12.07	-12.41	-12.06	-12.14	-12.03	-12.26
15	---	---	---	---	-11.93	-12.33	-12.05	-12.33	-12.12	-12.23	-11.97	-12.04
16	---	---	---	---	-12.29	-12.35	-12.33	-12.52	-12.15	-12.23	-11.88	-12.07
17	---	---	---	---	-12.25	-12.33	-12.37	-12.60	-12.08	-12.23	-11.79	-11.93
18	---	---	---	---	---	---	-11.99	-12.37	-12.12	-12.22	-11.76	-11.83
19	---	---	---	---	---	---	-12.16	-12.34	-11.83	-12.14	-11.67	-12.09
20	---	---	---	---	-12.34	-12.44	-12.29	-12.47	-11.75	-11.96	-11.67	-12.09
21	---	---	---	---	---	---	---	---	-11.67	-11.95	-11.59	-12.10
22	---	---	---	---	-12.26	-12.43	-12.16	-12.39	-11.95	-12.09	---	---
23	---	---	---	---	---	---	-12.25	-12.44	---	---	---	---
24	---	---	---	---	-12.10	-12.35	-12.18	-12.30	---	---	-12.02	-12.17
25	---	---	---	---	-12.17	-12.33	---	---	---	---	---	---
26	---	---	---	---	-12.27	-12.41	---	---	-12.09	-12.19	-12.09	-12.17
27	---	---	-12.24	-12.37	-12.38	-12.53	-11.94	-12.24	---	---	-12.05	-12.12
28	---	---	-12.02	-12.24	-12.23	-12.49	-11.94	-12.18	---	---	-12.02	-12.16
29	---	---	-12.05	-12.55	-12.11	-12.23	-12.15	-12.24	---	---	-11.78	-12.02
30	---	---	-12.55	-12.61	-12.11	-12.32	-12.15	-12.30	---	---	-11.75	-11.79
31	---	---	---	---	-12.28	-12.45	---	---	---	---	-11.71	-11.81
MONTH	---	---	-12.02	-12.61	-11.73	-12.77	-11.94	-12.60	-11.67	-12.35	-11.59	-12.26

ANNE ARUNDEL COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	-11.51	-11.71	-11.89	-11.91	-11.70	-11.81	-11.94	-12.06	-12.11	-12.22	-12.49	-12.61				
2	-11.54	-11.68	-11.68	-11.89	-11.68	-11.84	-11.94	-12.06	-12.13	-12.23	---	---				
3	-11.63	-11.71	-11.66	-11.98	-11.76	-12.00	-11.95	-12.06	-12.10	-12.22	-12.45	-12.56				
4	-11.60	-11.92	-11.91	-12.00	---	---	-11.86	-12.03	-12.05	-12.15	-12.46	-12.57				
5	-11.92	-12.21	-11.78	-11.95	---	---	-11.85	-11.92	-12.06	-12.16	-12.52	-12.63				
6	-12.05	-12.21	-11.82	-11.91	-11.70	-11.83	-11.92	-12.05	---	---	---	---				
7	-11.83	-12.05	-11.79	-11.92	-11.71	-11.83	-11.89	-12.05	---	---	---	---				
8	-11.73	-11.90	-11.87	-11.94	-11.74	-11.86	-11.89	-12.00	---	---	-12.31	-12.43				
9	-11.73	-11.81	-11.78	-11.87	-11.84	-11.88	-11.96	-12.14	---	---	---	---				
10	-11.81	-11.85	-11.78	-11.83	-11.84	-11.90	-12.08	-12.19	-12.26	-12.41	---	---				
11	-11.81	-11.92	-11.81	-11.86	---	---	-12.10	-12.15	---	---	---	---				
12	-11.68	-11.98	-11.85	-11.92	-11.71	-11.81	-11.92	-12.13	---	---	-12.54	-12.66				
13	-11.52	-11.69	-11.87	-11.94	-11.74	-11.81	-11.87	-12.13	---	---	-12.53	-12.65				
14	-11.51	-11.75	-11.87	-11.93	-11.70	-11.80	-11.88	-12.12	---	---	-12.62	-12.68				
15	-11.75	-12.09	-11.80	-11.94	-11.74	-11.94	-11.87	-12.11	-12.38	-12.46	-12.42	-12.66				
16	-11.83	-12.09	-11.91	-12.08	-11.89	-11.99	-12.04	-12.15	---	---	-12.46	-12.60				
17	-11.73	-11.87	-11.99	-12.08	-11.83	-11.99	-12.09	-12.15	-12.27	-12.40	-12.29	-12.60				
18	-11.80	-11.99	-11.83	-12.02	-11.80	-11.89	-12.00	-12.14	-12.23	-12.31	-12.05	-12.63				
19	-11.83	-11.99	-11.83	-12.05	-11.80	-11.93	-12.06	-12.12	-12.24	-12.31	-12.53	-12.83				
20	-11.87	-12.05	-11.94	-12.05	-11.91	-11.99	---	---	-12.31	-12.42	---	---				
21	-11.84	-12.05	-11.82	-11.96	-11.78	-11.91	---	---	-12.31	-12.36	---	---				
22	-11.77	-11.89	-11.86	-11.89	-11.72	-11.79	---	---	-12.33	-12.58	---	---				
23	-11.87	-11.92	-11.78	-11.88	-11.77	-11.93	-12.08	-12.17	---	---	---	---				
24	-11.92	-11.97	-11.75	-11.83	-11.86	-11.91	-12.14	-12.28	---	---	---	---				
25	-11.84	-11.96	-11.79	-11.85	-11.78	-11.88	-12.26	-12.35	-12.41	-12.47	---	---				
26	-11.64	-11.84	-11.67	-11.80	-11.75	-11.93	---	---	---	---	---	---				
27	-11.77	-11.84	-11.67	-11.72	-11.93	-12.04	-12.09	-12.15	---	---	---	---				
28	-11.81	-12.10	-11.57	-11.71	-11.91	-12.02	---	---	-12.36	-12.47	---	---				
29	-11.84	-12.03	-11.71	-11.97	-11.94	-12.12	---	---	-12.37	-12.47	---	---				
30	-11.84	-11.91	-11.72	-11.90	-12.00	-12.10	---	---	-12.35	-12.45	---	---				
31	---	---	-11.66	-11.78	---	---	---	---	---	---	---	---				
MONTH	-11.51	-12.21	-11.57	-12.08	-11.68	-12.12	-11.85	-12.35	-12.05	-12.58	-12.05	-12.83				
YEAR	-11.51	-12.83														

Daily Low Water Levels



BALTIMORE CITY

WELL NUMBER.--2S5E- 1. SITE ID.--391617076322001.

LOCATION.--Lat 39°16'17", long 76°32'20", Hydrologic Unit 02060003, near Holabird Ave. and Pumphrey St. at Ft. Holabird Industrial Park. Owner: City of Baltimore.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 290 ft; casing diameter 12 in. to unknown depth.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 28.2 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing extension, 2.35 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level reported 58 ft below land surface in 1934.

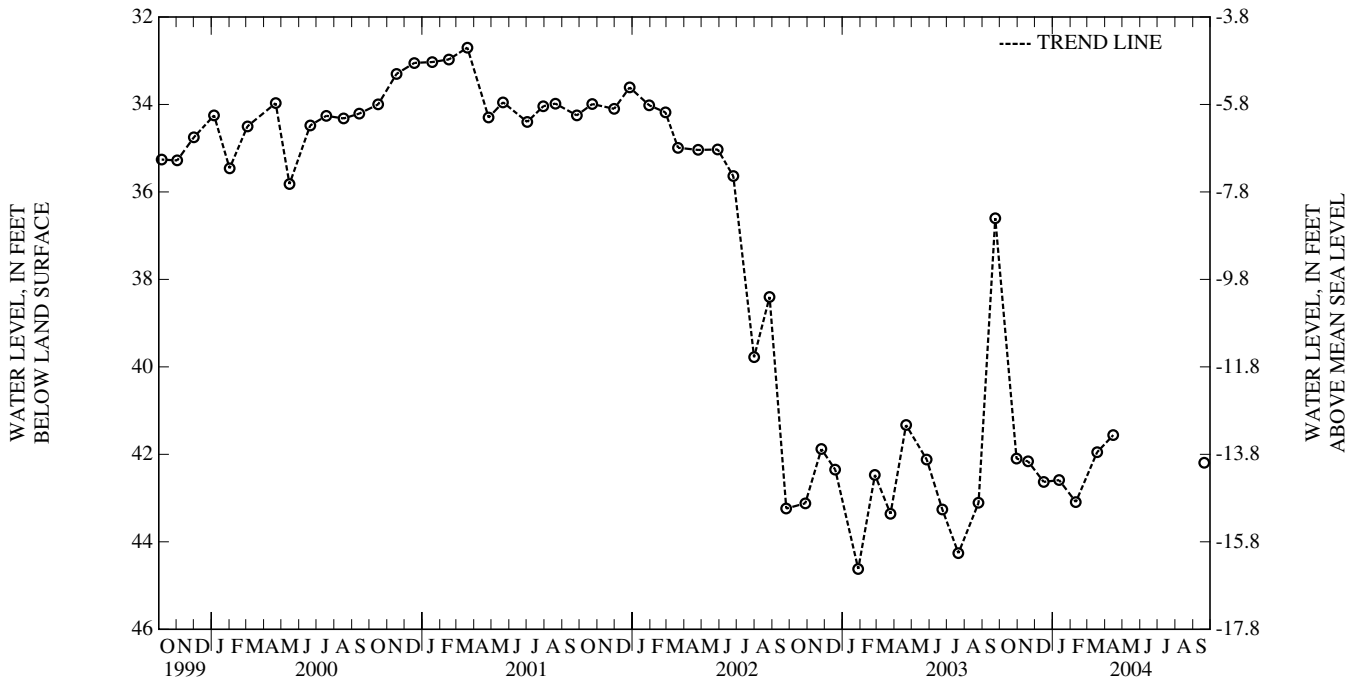
PERIOD OF RECORD.--April 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.70 ft below land surface, March 20, 2001; lowest measured, 103.70 ft below land surface, October 15, 1948.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	42.10	DEC 16, 2003	42.63	FEB 10, 2004	43.09	APR 15, 2004	41.56
NOV 19	42.16	JAN 12, 2004	42.59	MAR 18	41.95	SEP 20	42.19

HIGHEST 41.56 APR 15, 2004
 LOWEST 43.09 FEB 10, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE CITY--Continued

WELL NUMBER.--3S2E- 5. SITE ID.--391600076353301. PERMIT NUMBER.--BC-81-0087.

LOCATION.--Lat 39°16'00", long 76°35'33", Hydrologic Unit 02060003, at Latrobe Park. Owner: U.S. Geological Survey.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 136 ft; casing diameter 4 in., to 126 ft; screen diameter 3 in., from 126 to 136 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 15 ft. above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.92 ft above land surface.

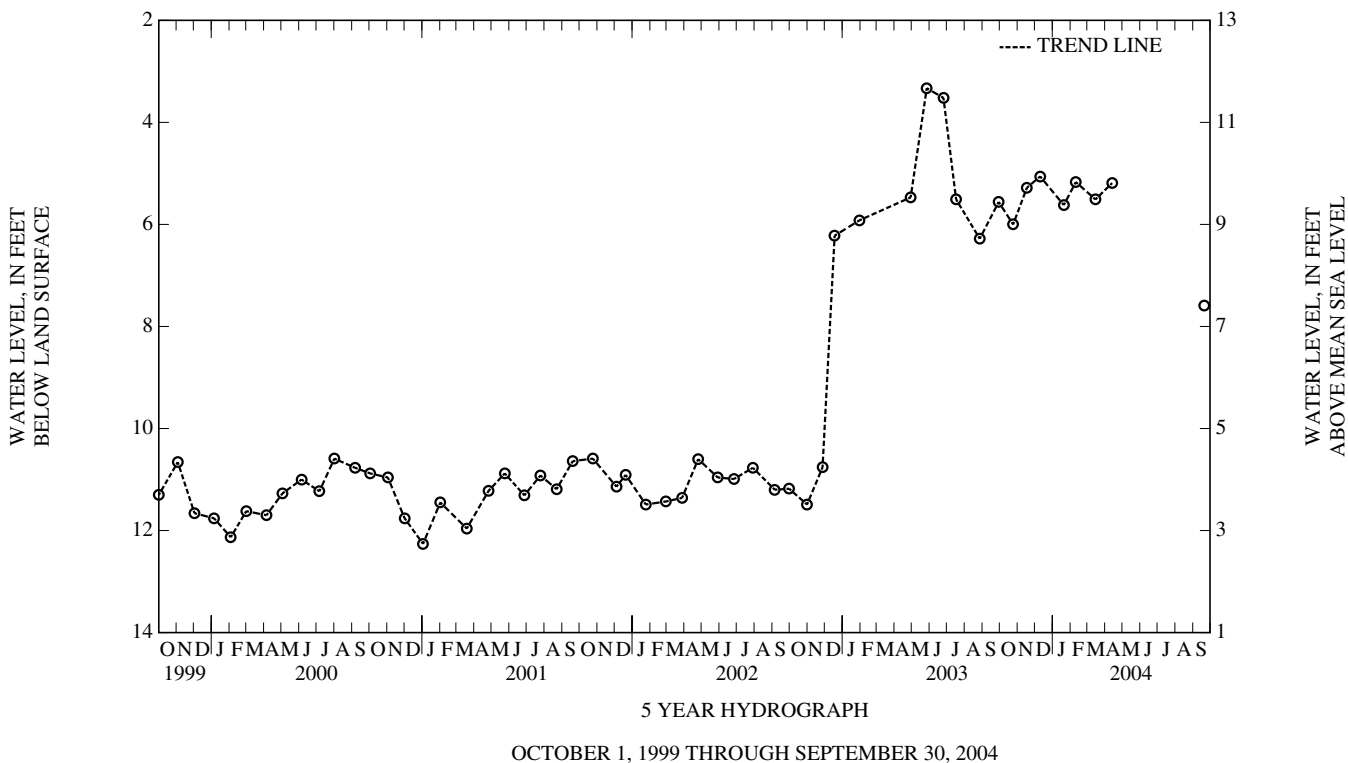
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.33 ft below land surface, May 27, 2003; lowest measured, 17.71 ft below land surface, December 30, 1983.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	6.00	DEC 10, 2003	5.06	FEB 10, 2004	5.17	APR 13, 2004	5.19
NOV 17	5.28	JAN 20, 2004	5.62	MAR 15	5.51	SEP 20	7.59
HIGHEST 5.06 DEC 10, 2003							
LOWEST 7.59 SEP 20, 2004							



BALTIMORE CITY--Continued

WELL NUMBER.--3S5E- 46. SITE ID.--391556076315301. PERMIT NUMBER.--BC-81-0088.

LOCATION.--Lat 39°15'56", long 76°31'53", Hydrologic Unit 02060003, at Ft. Holabird Industrial Park, near Colgate Creek. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 73 ft; casing diameter 4 in., to 63 ft; screen diameter 3 in., from 63 to 73 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.07 ft above land surface.

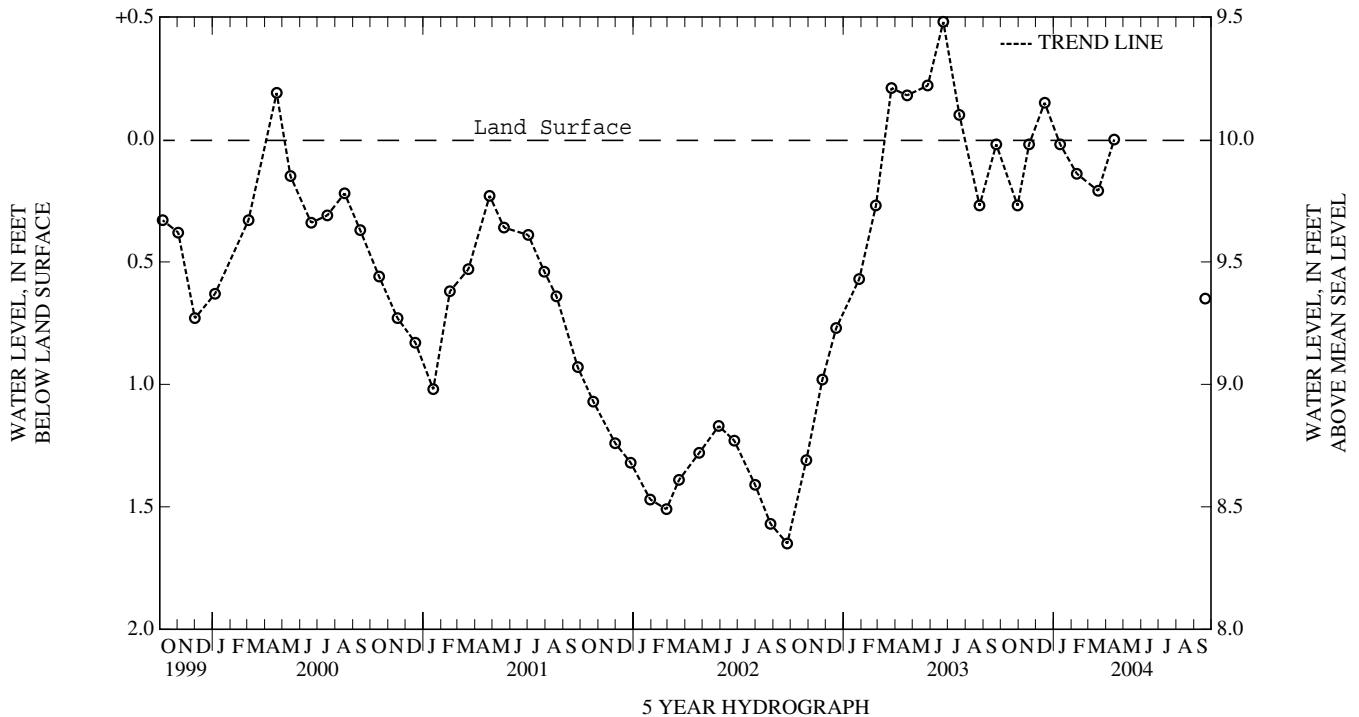
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.48 ft above land surface, June 23, 2003; lowest measured, 3.07 ft below land surface, July 8, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	.27	DEC 16, 2003	+ .15	FEB 10, 2004	.14	APR 15, 2004	.00
NOV 19	.02	JAN 12, 2004	.02	MAR 18	.21	SEP 20	.65
HIGHEST		+ .15 DEC 16, 2003					
LOWEST		.65 SEP 20, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE CITY--Continued

WELL NUMBER.--5S2E- 24. SITE ID.--391349076354501. PERMIT NUMBER.--BC-81-0089.

LOCATION.--Lat 39°13'49", long 76°35'45", Hydrologic Unit 02060003, at Farrington Park. Owner: U.S. Geological Survey.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 272 ft; casing diameter 4 in., to 262 ft; screen diameter 3 in., from 262 ft to 272 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.35 ft above land surface.

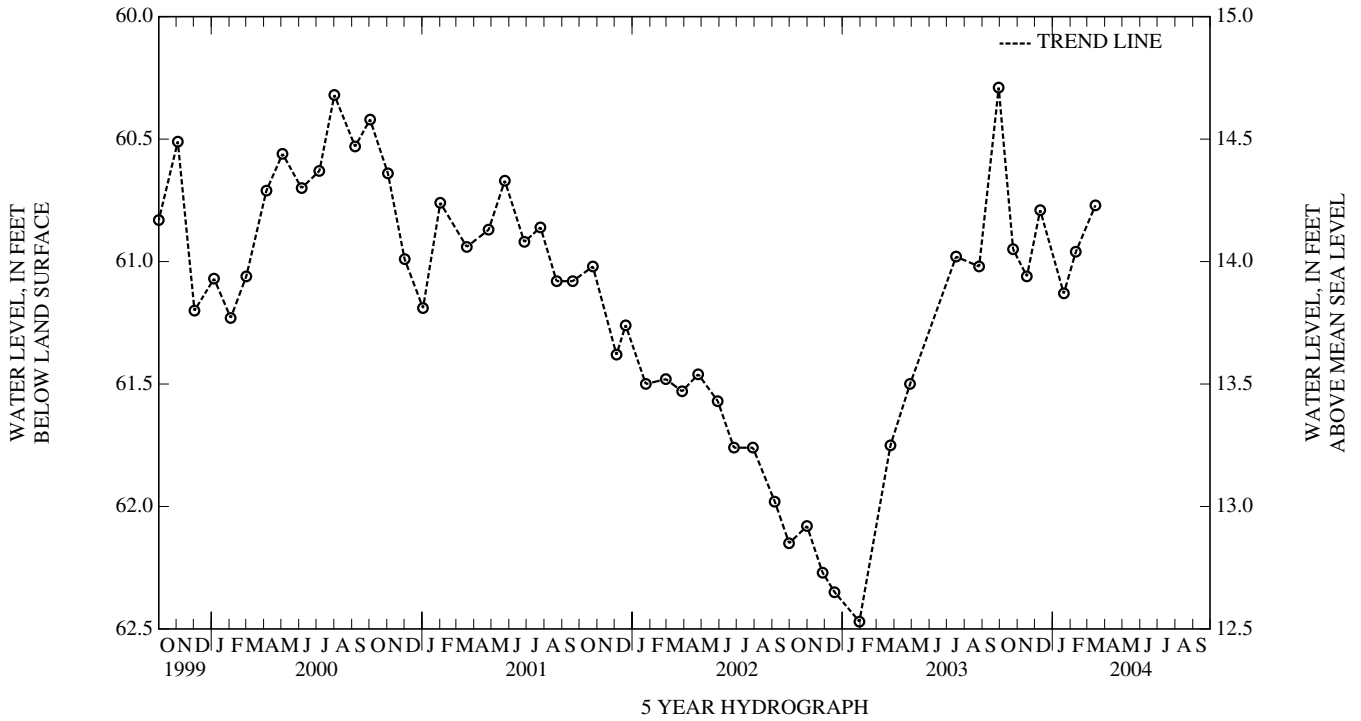
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--January 1983 to March 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 60.29 ft below land surface, September 29, 2003; lowest measured, 66.36 ft below land surface, May 5, 1983.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	60.95	DEC 10, 2003	60.79	FEB 10, 2004	60.96
NOV 17	61.06	JAN 20, 2004	61.13	MAR 15	60.77
HIGHEST 60.77 MAR 15, 2004					
LOWEST 61.13 JAN 20, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY

WELL NUMBER.--BA Cd 26. SITE ID.--393129076384201. PERMIT NUMBER.--BA-02-8527.

LOCATION.--Lat 39°31'29", long 76°38'42", Hydrologic Unit, 02060003, 1.4 mi south of Sparks, near York Road. Owner: Diecraft Division, Leica Inc.

AQUIFER.--Baltimore Gneiss of Precambrian age. Aquifer code: 400BLMR.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 250 ft; casing diameter 6 in., to 19 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 480 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.30 ft above land surface.

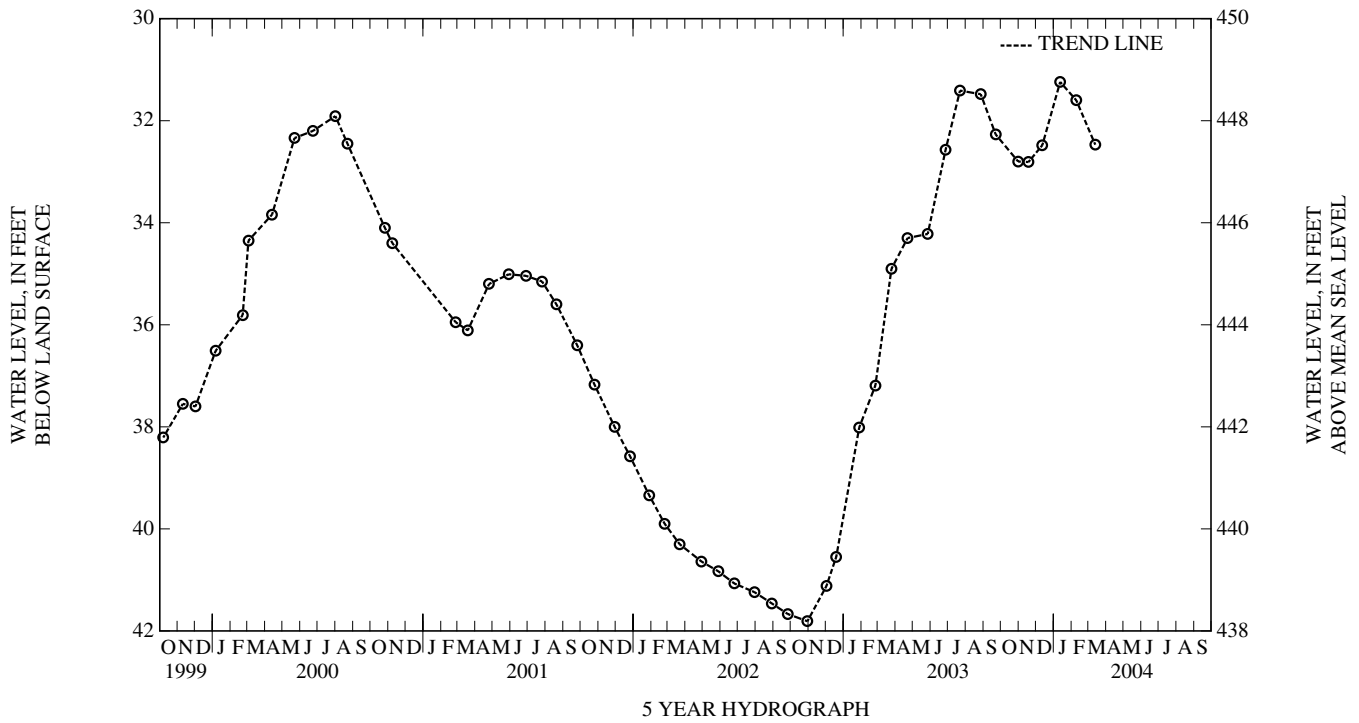
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--January 1959 to March 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.42 ft below land surface, September 9, 1975; lowest measured, 80.20 ft below land surface, December 23, 1969.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	32.80	DEC 12, 2003	32.48	FEB 09, 2004	31.60
NOV 18	32.81	JAN 12, 2004	31.24	MAR 13	32.47
HIGHEST 31.24 JAN 12, 2004					
LOWEST 32.81 NOV 18, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ce 21. SITE ID.--393102076341801. PERMIT NUMBER.--BA-02-1266.

LOCATION.--Lat 39°31'02", long 76°34'18", Hydrologic Unit 02060003, on Paper Mill Road, 0.6 mi west of Jacksonville. Owner: Baltimore County.

AQUIFER.--Loch Raven Formation of Cambrian Age. Aquifer code: 370LCRV.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 350 ft; casing diameter 10 in., to 12.4 ft; casing diameter 6 in., to 33.2 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 536 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

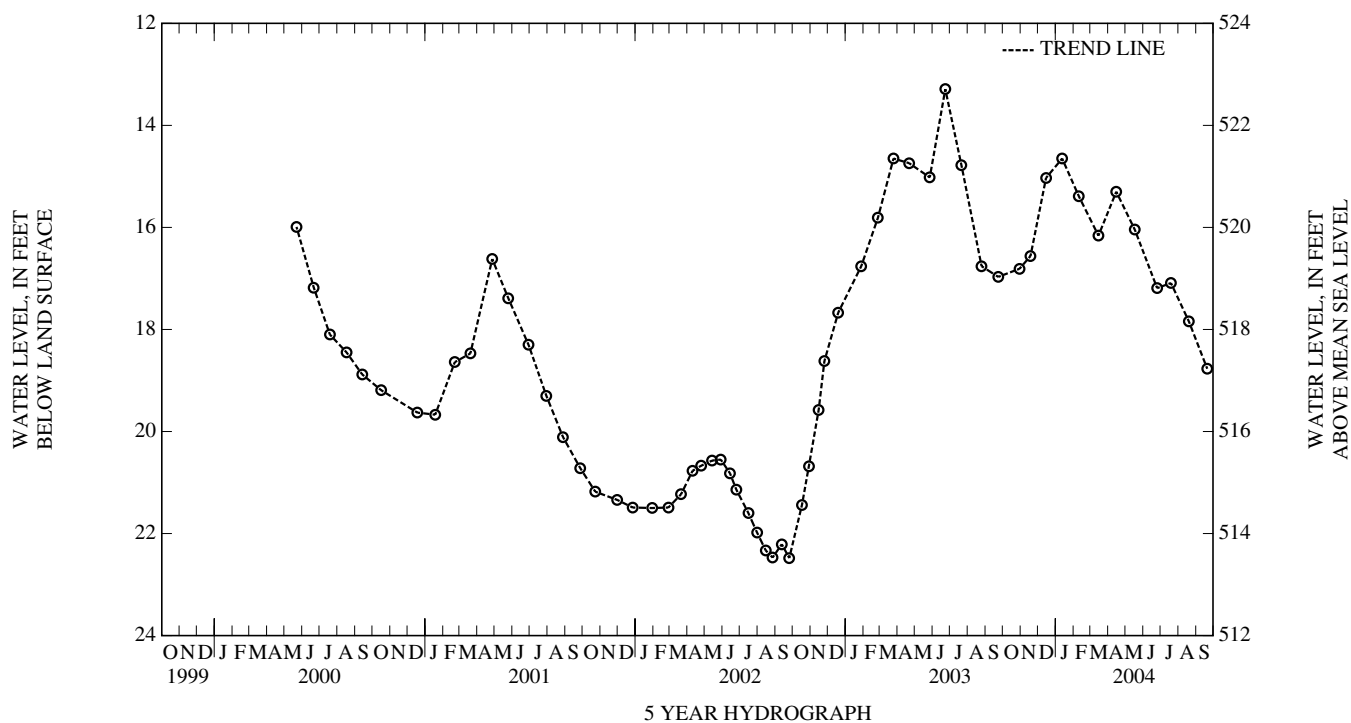
PERIOD OF RECORD.--November and December 1955, November 1956 through September 1975, July 1977 through July 1996, November 1996 to September 1999, and May 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.60 ft below land surface, June 23, 1972; lowest measured, 22.48 ft below land surface, September 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	16.81	JAN 12, 2004	14.65	APR 15, 2004	15.30	JUL 19, 2004	17.09
NOV 18	16.56	FEB 10	15.39	MAY 17	16.04	AUG 19	17.84
DEC 15	15.03	MAR 15	16.16	JUN 25	17.19	SEP 20	18.77

HIGHEST 14.65 JAN 12, 2004
LOWEST 18.77 SEP 20, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.-- BA Dc 444. SITE ID.--392931076410301. PERMIT NUMBER.--BA-81-4198.

LOCATION.--Lat 39°29'31", long 76°41'03", Hydrologic Unit 02060003, at Oregon Ridge Park. Owner: Baltimore County Parks and Recreation.

AQUIFER.--Cockeysville Marble of Cambrian age. Aquifer code: 370CCKV.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 300 ft; casing diameter 6 in., to 88 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from November 1998 to current year.

DATUM.--Elevation of land surface is 390 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 1.62 ft above land surface.

REMARKS.--Collection of Basic Records (CBR) observation well. Missing data due to recorder malfunction.

PERIOD OF RECORD.--September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.46 ft below land surface, April 9, 1997; lowest measured, 45.88 ft below land surface, November 10, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

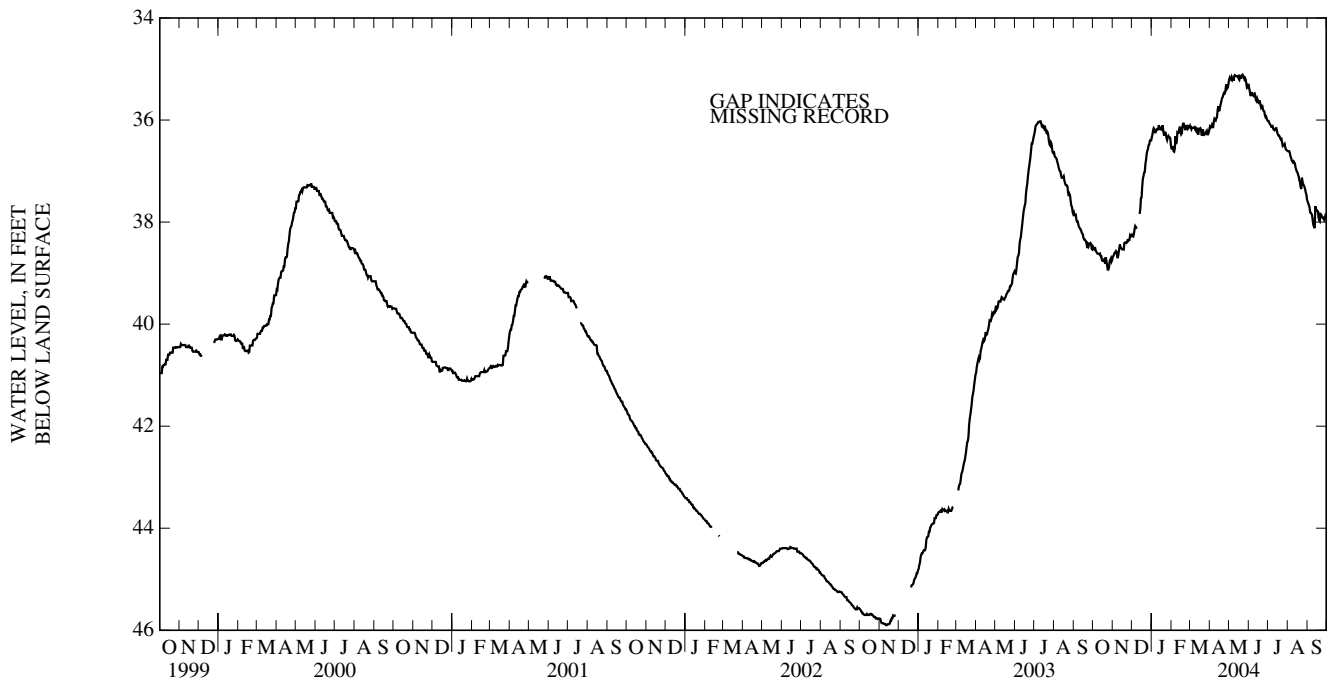
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	38.67	JAN 12, 2004	36.02	APR 12, 2004	35.96	JUL 19, 2004	36.31
NOV 18	38.53	FEB 09	36.36	MAY 27	35.21	SEP 21	37.83
DEC 12	37.86	MAR 13	36.09	JUN 22	35.68		
HIGHEST 35.21		MAY 27, 2004					
LOWEST 38.67		OCT 31, 2003					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	38.49	38.46	38.68	38.65	38.25	38.16	36.34	36.27	36.56	36.51	36.11	36.07
2	38.52	38.46	38.66	38.63	38.27	38.24	36.28	36.20	36.56	36.51	36.14	36.04
3	38.53	38.45	38.63	38.59	38.28	38.23	36.20	36.14	36.51	36.30	36.18	36.14
4	38.49	38.43	38.60	38.58	38.23	38.14	36.16	36.14	36.61	36.42	36.15	36.10
5	38.55	38.49	38.60	38.54	38.14	38.04	36.18	36.08	36.62	36.56	36.15	36.01
6	38.58	38.54	38.57	38.54	38.08	38.04	36.24	36.18	36.56	36.20	36.15	35.96
7	38.60	38.57	38.59	38.55	38.10	38.07	36.24	36.18	36.32	36.16	36.15	36.01
8	38.62	38.58	38.69	38.59	38.11	38.09	36.20	36.15	36.47	36.32	36.14	36.01
9	38.62	38.59	38.69	38.61	38.10	38.07	36.18	36.13	36.42	36.24	36.19	36.14
10	38.62	38.59	38.61	38.52	---	---	36.19	36.17	36.24	36.14	36.21	36.16
11	38.63	38.61	38.52	38.44	---	---	36.18	36.05	36.25	36.16	36.16	36.04
12	38.62	38.57	38.44	38.36	---	---	36.10	36.02	36.25	36.15	36.17	36.02
13	38.67	38.62	38.49	38.34	37.84	37.74	36.14	36.05	36.17	36.13	36.27	36.17
14	38.67	38.44	38.51	38.49	37.74	37.42	36.17	35.98	36.13	36.10	36.27	36.10
15	38.75	38.44	38.53	38.49	37.53	37.42	36.16	35.96	36.23	36.11	36.17	36.10
16	38.76	38.73	38.53	38.51	37.52	37.30	36.19	36.16	36.28	36.23	36.17	36.02
17	38.76	38.73	38.54	38.50	37.30	37.15	36.19	36.09	36.26	36.13	36.16	36.06
18	38.74	38.70	38.54	38.41	37.15	37.10	36.10	35.94	36.13	36.03	36.19	36.14
19	38.78	38.70	38.41	38.23	37.10	37.02	36.22	36.10	36.07	35.99	36.29	36.10
20	38.81	38.69	38.40	38.27	37.03	36.98	36.29	36.22	36.07	35.92	36.29	35.98
21	38.69	38.59	38.40	38.36	37.02	36.86	36.29	36.21	36.11	35.91	36.18	35.98
22	38.76	38.65	38.41	38.38	36.86	36.78	36.23	36.10	36.18	36.11	36.27	36.18
23	38.85	38.76	38.40	38.36	36.78	36.66	36.28	36.23	36.18	36.10	36.29	36.22
24	38.93	38.85	38.36	38.23	36.66	36.51	36.35	36.19	36.10	36.04	36.28	36.23
25	38.93	38.88	38.37	38.32	36.60	36.54	36.39	36.34	36.15	36.09	36.26	36.23
26	38.88	38.77	38.35	38.32	36.57	36.49	36.34	36.31	36.17	36.12	36.23	36.17
27	38.77	38.65	38.35	38.26	36.49	36.47	36.31	36.16	36.13	36.12	36.21	36.16
28	38.74	38.69	38.26	38.08	36.48	36.40	36.33	36.19	36.15	36.12	36.28	36.21
29	38.71	38.61	38.28	38.12	36.40	36.26	36.34	36.33	36.14	36.10	36.28	36.25
30	38.77	38.71	38.28	38.19	36.40	36.22	36.36	36.31	---	---	36.25	36.19
31	38.74	38.68	---	---	36.40	36.27	36.51	36.36	---	---	36.19	36.13
MONTH	38.93	38.43	38.69	38.08	38.28	36.22	36.51	35.94	36.62	35.91	36.29	35.96

BALTIMORE COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	36.13	36.03	35.21	35.17	35.35	35.26	36.02	35.97	36.61	36.59	37.60	37.56				
2	36.15	36.10	35.17	35.09	35.41	35.35	36.02	35.99	36.61	36.59	37.64	37.60				
3	36.14	36.05	35.20	35.14	35.49	35.41	36.06	36.01	36.61	36.59	37.67	37.64				
4	36.10	35.99	35.21	35.14	35.53	35.47	36.08	36.05	36.64	36.60	37.72	37.67				
5	36.14	36.09	35.16	35.09	35.47	35.42	36.10	36.05	36.71	36.64	37.81	37.72				
6	36.14	36.03	35.20	35.13	35.47	35.43	36.13	36.09	36.74	36.71	37.82	37.79				
7	36.04	35.94	35.16	35.12	35.50	35.47	36.13	36.00	36.79	36.74	37.84	37.80				
8	35.98	35.91	35.23	35.14	35.52	35.48	36.12	36.05	36.81	36.79	37.87	37.84				
9	36.00	35.93	35.14	35.08	35.49	35.46	36.17	36.12	36.83	36.80	37.98	37.82				
10	36.01	35.94	35.12	35.09	35.48	35.46	36.19	36.17	36.81	36.78	38.06	37.98				
11	35.96	35.93	35.13	35.10	35.54	35.48	36.20	36.17	36.83	36.75	38.09	38.05				
12	35.95	35.81	35.14	35.10	35.61	35.54	36.18	36.11	36.85	36.81	38.12	37.60				
13	35.81	35.65	35.14	35.11	35.63	35.58	36.16	36.12	36.93	36.81	37.69	37.64				
14	35.73	35.68	35.15	35.11	35.58	35.52	36.16	36.09	36.97	36.93	37.74	37.69				
15	35.81	35.73	35.14	35.10	35.62	35.56	36.22	36.15	37.01	36.95	37.76	37.73				
16	35.81	35.73	35.19	35.14	35.65	35.62	36.27	36.22	37.03	37.00	37.78	37.74				
17	35.73	35.64	35.21	35.12	35.63	35.59	36.30	36.27	37.07	37.03	37.79	37.67				
18	35.68	35.62	35.14	35.08	35.63	35.61	36.30	36.27	37.11	37.05	37.91	37.64				
19	35.62	35.50	35.15	35.09	35.70	35.63	36.32	36.27	37.18	37.11	37.96	37.91				
20	35.57	35.51	35.19	35.12	35.75	35.70	36.36	36.32	37.22	37.18	37.98	37.81				
21	35.55	35.45	35.12	35.08	35.72	35.68	36.38	36.36	37.32	37.20	37.84	37.81				
22	35.50	35.46	35.11	35.08	35.72	35.68	36.37	36.34	37.35	37.07	37.85	37.83				
23	35.47	35.38	35.13	35.09	35.79	35.72	36.44	36.37	37.13	37.09	37.88	37.85				
24	35.48	35.43	35.15	35.11	35.82	35.79	36.51	36.44	37.21	37.13	37.91	37.88				
25	35.45	35.34	35.20	35.15	35.83	35.81	36.50	36.49	37.26	37.21	37.91	37.88				
26	35.34	35.26	35.18	35.16	35.90	35.80	36.49	36.46	37.28	37.25	37.94	37.90				
27	35.30	35.21	35.21	35.16	35.94	35.90	36.47	36.45	37.31	37.27	37.96	37.92				
28	35.38	35.30	35.29	35.19	35.93	35.89	36.54	36.47	37.35	37.30	37.92	37.72				
29	35.36	35.29	35.37	35.29	35.98	35.90	36.58	36.54	37.42	37.35	37.86	37.77				
30	35.29	35.21	35.36	35.29	36.01	35.97	36.59	36.56	37.46	37.42	37.87	37.85				
31	---	---	35.29	35.23	---	---	36.60	36.58	37.56	37.44	---	---				
MONTH	36.15	35.21	35.37	35.08	36.01	35.26	36.60	35.97	37.56	36.59	38.12	37.56				
YEAR	38.93	35.08														

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ea 18. SITE ID.--392045076512501. PERMIT NUMBER.--BA-01-8151.

LOCATION.--Lat 39°20'45", long 76°51'25", Hydrologic Unit 02060003, at Granite. Owner: Maryland National Guard (U.S. Army).

AQUIFER.--Woodstock Granite of Silurian age. Aquifer code: 350WDCK.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 250 ft; casing diameter 10 in., to 50.7 ft; casing diameter 6 in., with depth to 71.3 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level digital recorder--60 minute recorder interval from September 1999 to current year.

DATUM.--Elevation of land surface is 491 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. U.S. Geological Survey water-level telemeter at well (See MD-DE-DC District WEB page, Real-Time, Ground-Water, Maryland).

PERIOD OF RECORD.-- November 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.94 ft below land surface, June 24, 1972; lowest measured, 28.24 ft below land surface, November 4, 5, 7, and 8, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

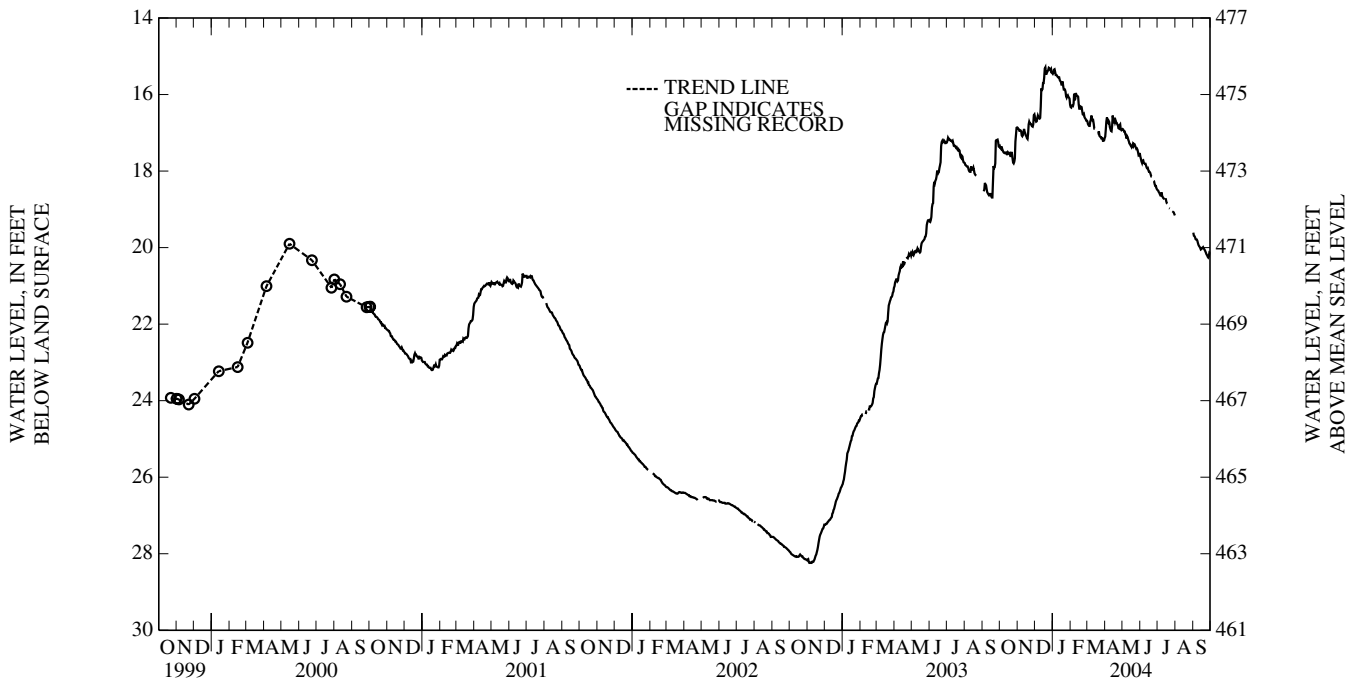
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	16.83	MAR 12, 2004	16.72	JUN 23, 2004	18.26	AUG 02, 2004	18.72
NOV 18	17.09	18	16.91	24	18.26	06	18.93
DEC 12	15.78	APR 12	16.95	JUL 15	18.66	13	18.95
JAN 12, 2004	15.44	MAY 27	17.45	23	18.98	31	19.61
FEB 10	15.91	JUN 22	18.16	26	19.09	SEP 02	19.68
HIGHEST	15.44	JAN 12, 2004					
LOWEST	19.68	SEP 02, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.35	17.33	16.87	16.83	16.60	16.46	15.46	15.36	16.33	16.27	16.70	16.68
2	17.40	17.34	16.90	16.87	16.67	16.60	15.43	15.35	16.34	16.29	16.77	16.65
3	17.42	17.32	16.91	16.87	16.71	16.67	15.35	15.29	16.29	16.07	16.80	16.77
4	17.36	17.27	16.95	16.91	16.70	16.62	15.34	15.30	16.29	16.14	16.82	16.74
5	17.42	17.36	16.95	16.92	16.62	16.50	15.41	15.31	16.30	16.24	16.82	16.67
6	17.46	17.42	16.94	16.90	16.55	16.51	15.49	15.41	16.24	15.84	16.70	16.57
7	17.50	17.45	16.96	16.91	16.59	16.54	15.49	15.48	15.98	15.82	16.66	16.46
8	17.52	17.48	17.07	16.96	16.62	16.59	15.50	15.48	16.15	15.98	16.55	16.46
9	17.53	17.50	17.09	17.05	16.63	16.60	15.53	15.48	16.11	15.96	16.64	16.55
10	17.52	17.48	17.06	16.97	16.61	16.32	15.55	15.53	15.96	15.88	16.68	16.64
11	17.53	17.50	16.98	16.90	16.32	15.70	15.55	15.49	16.02	15.89	16.67	16.57
12	17.52	17.45	16.90	16.80	15.84	15.74	15.55	15.46	16.03	15.99	16.76	16.55
13	17.56	17.52	16.97	16.78	15.88	15.84	15.62	15.51	16.04	15.99	16.89	16.76
14	17.56	17.33	17.01	16.97	15.86	15.63	15.65	15.45	16.06	16.02	16.89	16.76
15	17.51	17.31	17.07	16.99	15.70	15.62	15.67	15.43	16.27	16.06	---	---
16	17.53	17.48	17.09	17.07	15.70	15.55	15.74	15.67	16.37	16.27	---	---
17	17.54	17.50	17.14	17.09	15.55	15.32	15.74	15.66	16.37	16.31	---	---
18	17.53	17.48	17.16	17.03	15.32	15.23	15.66	15.49	16.31	16.23	---	---
19	17.58	17.48	17.03	16.78	15.29	15.25	15.78	15.65	16.32	16.21	17.03	16.85
20	17.63	17.50	16.78	16.70	15.46	15.29	15.87	15.78	16.33	16.19	17.03	16.72
21	17.50	17.37	16.71	16.67	15.46	15.41	15.87	15.82	16.43	16.19	16.96	16.72
22	17.55	17.44	16.75	16.71	15.42	15.38	15.87	15.71	16.52	16.43	17.08	16.96
23	17.67	17.53	16.76	16.74	15.39	15.35	15.92	15.87	16.53	16.48	17.10	17.04
24	17.78	17.67	16.77	16.63	15.36	15.25	16.04	15.85	16.51	16.45	17.11	17.08
25	17.80	17.75	16.81	16.77	15.30	15.28	16.08	16.03	16.59	16.51	17.14	17.10
26	17.76	17.66	16.83	16.80	15.31	15.29	16.04	16.02	16.62	16.59	17.13	17.09
27	17.67	17.23	16.84	16.78	15.34	15.29	16.02	15.87	16.64	16.60	17.14	17.08
28	17.23	17.05	16.78	16.54	15.37	15.34	16.06	15.89	16.68	16.64	17.21	17.14
29	17.05	16.81	16.54	16.49	15.34	15.22	16.08	16.06	16.68	16.67	17.21	17.19
30	16.87	16.81	16.52	16.47	15.43	15.19	16.11	16.05	---	---	17.20	17.14
31	16.86	16.83	---	---	15.44	15.36	16.27	16.11	---	---	17.14	17.10
MONTH	17.80	16.81	17.16	16.47	16.71	15.19	16.27	15.29	16.68	15.82	17.21	16.46

BALTIMORE COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17.10	16.91	16.90	16.87	17.62	17.53	18.50	18.45	---	---	19.61	19.60
2	16.91	16.70	16.91	16.80	17.68	17.62	18.51	18.48	---	---	19.69	19.60
3	16.70	16.51	16.94	16.87	17.75	17.68	18.55	18.50	---	---	19.70	19.68
4	16.60	16.46	16.97	16.90	17.79	17.73	18.57	18.54	---	---	19.73	19.69
5	16.70	16.59	16.97	16.89	17.73	17.69	18.61	18.55	---	---	19.78	19.73
6	16.73	16.64	17.04	16.97	17.72	17.69	18.64	18.61	---	---	19.79	19.76
7	16.69	16.63	17.07	16.99	17.78	17.72	18.64	18.56	---	---	19.79	19.77
8	16.72	16.68	17.15	17.07	17.80	17.78	18.56	18.54	---	---	19.82	19.78
9	16.85	16.72	17.09	17.06	17.81	17.76	18.66	18.56	---	---	19.88	19.78
10	16.90	16.85	17.12	17.09	17.81	17.77	18.68	18.65	---	---	19.93	19.88
11	16.95	16.87	17.18	17.12	17.86	17.81	18.71	18.68	---	---	19.96	19.92
12	16.96	16.82	17.22	17.18	17.91	17.86	18.72	18.67	---	---	19.98	19.94
13	16.82	16.53	17.28	17.22	17.93	17.88	18.74	18.70	---	---	20.01	19.97
14	16.55	16.50	17.29	17.26	17.92	17.87	---	---	---	---	20.05	20.00
15	16.66	16.55	17.33	17.26	17.98	17.92	18.71	18.60	---	---	20.04	19.97
16	16.70	16.63	17.35	17.31	18.02	17.98	18.79	18.71	---	---	20.01	19.97
17	16.67	16.61	17.38	17.33	18.02	17.98	18.84	18.79	---	---	20.01	19.93
18	16.73	16.66	17.35	17.29	18.04	18.01	18.85	18.83	---	---	19.99	19.91
19	16.68	16.59	17.30	17.26	18.09	18.03	---	---	---	---	20.02	19.98
20	16.73	16.65	17.34	17.28	18.14	18.09	---	---	---	---	20.04	20.02
21	16.74	16.68	17.29	17.26	18.14	18.10	18.97	18.95	---	---	20.07	20.03
22	16.78	16.71	17.30	17.26	---	---	18.98	18.96	---	---	20.10	20.07
23	16.81	16.77	17.34	17.29	---	---	---	---	---	---	20.14	20.10
24	16.88	16.81	17.38	17.33	18.29	18.26	---	---	---	---	20.18	20.14
25	16.89	16.80	17.42	17.38	18.28	18.25	---	---	---	---	20.20	20.17
26	16.80	16.72	17.41	17.38	18.35	18.25	---	---	---	---	20.24	20.19
27	16.78	16.66	17.44	17.38	18.39	18.35	19.09	19.05	---	---	20.26	20.23
28	16.91	16.78	17.51	17.40	18.39	18.35	19.07	19.01	---	---	20.23	20.13
29	16.93	16.89	17.59	17.51	18.45	18.37	19.08	19.04	---	---	20.13	20.09
30	16.91	16.86	17.58	17.53	18.48	18.44	19.12	19.08	---	---	20.14	20.09
31	---	---	17.53	17.48	---	---	19.16	19.12	---	---	---	---
MONTH	17.10	16.46	17.59	16.80	18.48	17.53	19.16	18.45	---	---	20.26	19.60
YEAR	20.26	15.19										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ec 43. SITE ID.--392305076432001.

LOCATION.--Lat 39°23'05", long 76°43'20", Hydrologic Unit 02060003, near Pikesville, at Druid Ridge Cemetery. Owner: Druid Ridge Cemetery.

AQUIFER.--Baltimore Gneiss of Precambrian age. Aquifer code: 400BLMR.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 111 ft; casing diameter 6 in., to 40 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

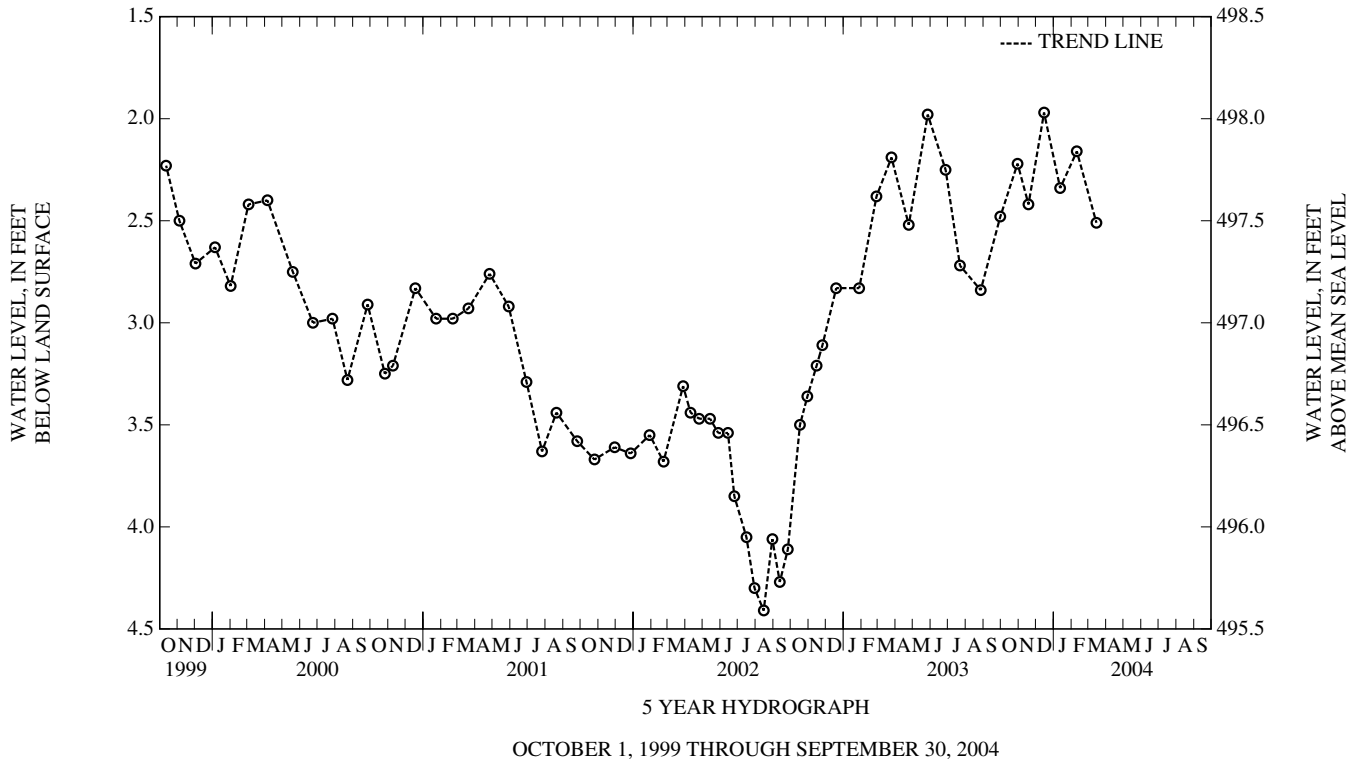
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--March 1956 to March 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.27 ft below land surface, June 24, 1972; lowest measured, 4.69 ft below land surface, November 11, 1964.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	2.22	DEC 15, 2003	1.97	FEB 10, 2004	2.16
NOV 18	2.42	JAN 12, 2004	2.34	MAR 15	2.51
HIGHEST 1.97 DEC 15, 2003					
LOWEST 2.51 MAR 15, 2004					



BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ee 145. SITE ID.--392436076332201. PERMIT NUMBER.--BA-94-5859.

LOCATION.--Lat 39°24'36", long 76°33'22", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER.--Colluvium of Quaternary age. Aquifer code: 110CLVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 14.15 ft; casing diameter 2 in., to 8.65 ft., and 13.65 to 14.15 ft; screen diameter 2 in., from 8.65 to 13.65 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 223.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.85 ft above land surface.

REMARKS.--Minebank Run Project observation well.

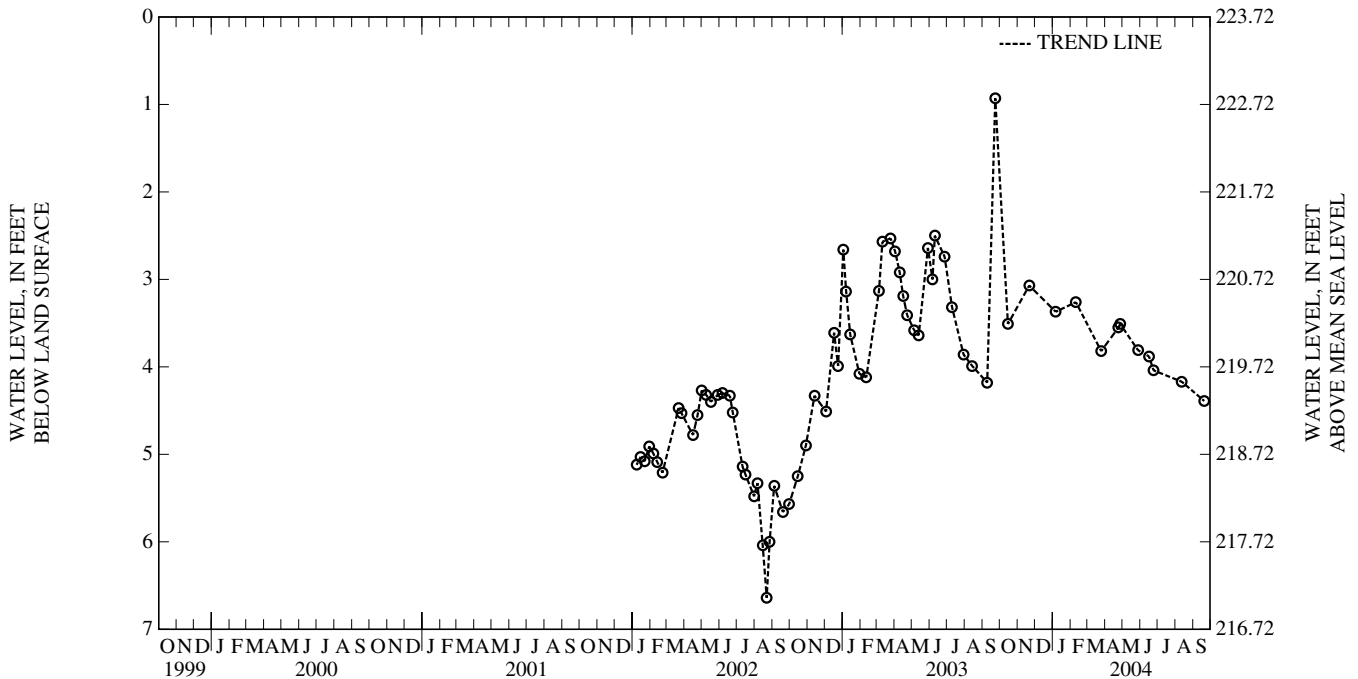
PERIOD OF RECORD.--January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.93 ft below land surface, September 23, 2003; lowest measured, 6.64 ft below land surface, August 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2003	3.51	FEB 10, 2004	3.26	APR 27, 2004	3.51	JUN 24, 2004	4.04
NOV 21	3.07	MAR 25	3.82	MAY 28	3.81	AUG 12	4.17
JAN 06, 2004	3.37	APR 24	3.55	JUN 16	3.88	SEP 20	4.39

HIGHEST 3.07 NOV 21, 2003
 LOWEST 4.39 SEP 20, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ee 161. SITE ID.--392437076332301. PERMIT NUMBER.--BA-94-5863.

LOCATION.--Lat 39°24'37", long 76°33'23", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER.--Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 10.80 ft; casing diameter 2 in., to 5.30 ft, and 10.30 to 10.80 ft; screen diameter 2 in., from 5.30 to 10.30 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 224.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.90 ft above land surface.

REMARKS.--Minebank Run Project observation well.

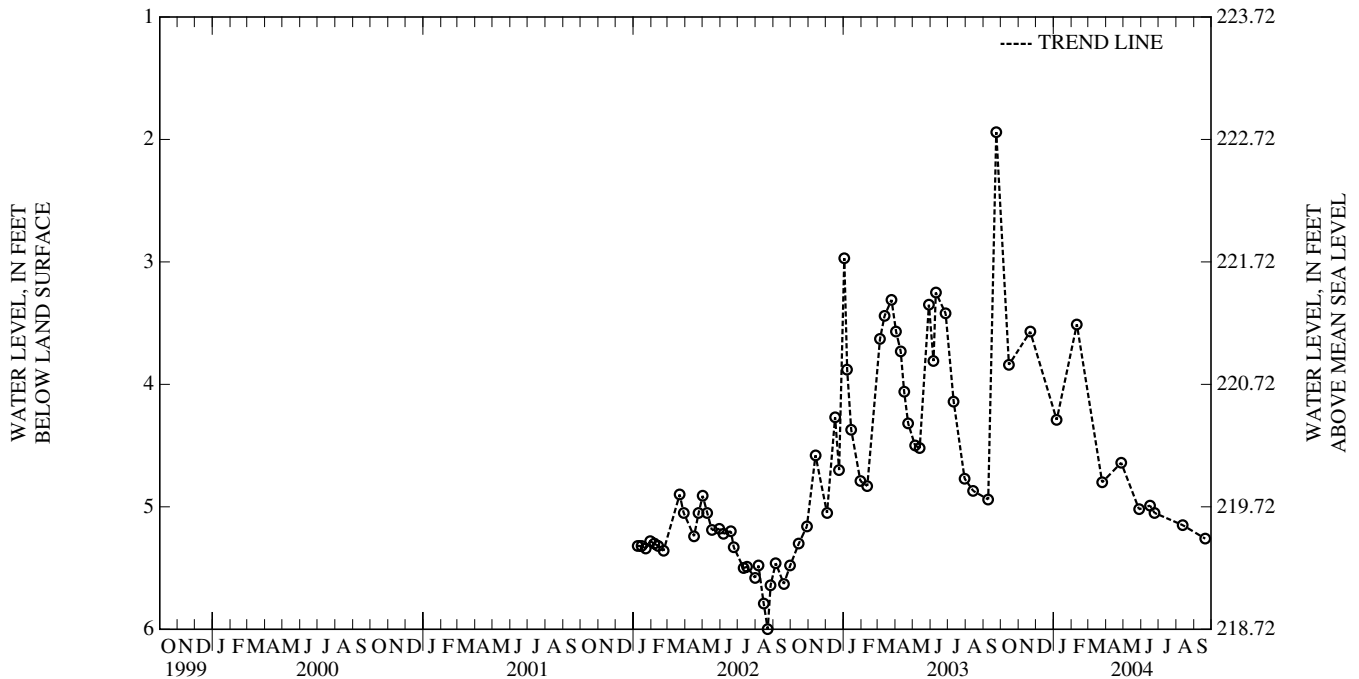
PERIOD OF RECORD.--January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.94 ft below land surface, September 23, 2003; lowest measured, 6.00 ft below land surface, August 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2003	3.84	FEB 10, 2004	3.51	MAY 28, 2004	5.02	AUG 12, 2004	5.15
NOV 21	3.57	MAR 25	4.80	JUN 16	4.99	SEP 20	5.26
JAN 06, 2004	4.29	APR 27	4.64	24	5.05		

HIGHEST 3.51 FEB 10, 2004
 LOWEST 5.26 SEP 20, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ee 170. SITE ID.--392438076332201. PERMIT NUMBER.--BA-94-5876.

LOCATION.--Lat 39°24'38", long 76°33'22", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER.--Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 15 ft; casing diameter 2 in., to 9.50 ft, and 14.50 to 15.00 ft; screen diameter 2 in., from 9.50 to 14.50 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 228.37 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.22 ft above land surface.

REMARKS.-- Minebank Run Project observation well.

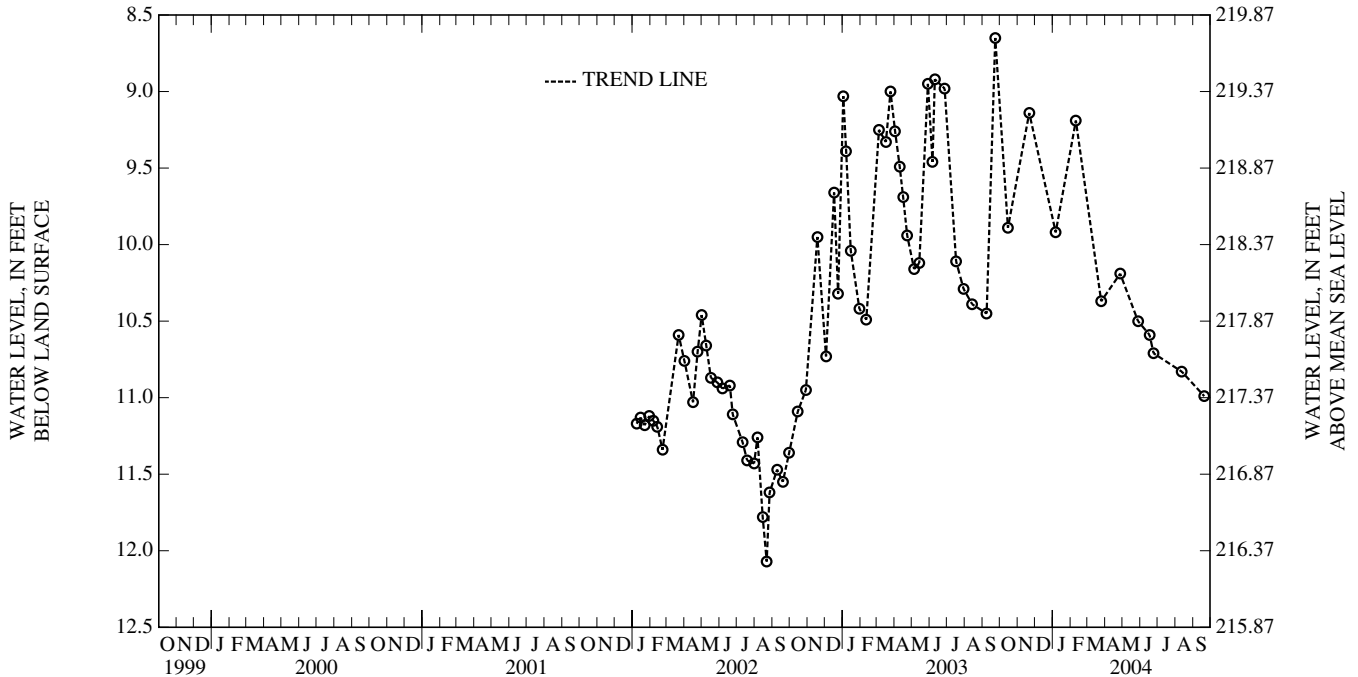
PERIOD OF RECORD.--January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.65 ft below land surface, September 23, 2003; lowest measured, 12.07 ft below land surface, August 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2003	9.89	FEB 10, 2004	9.19	MAY 28, 2004	10.50	AUG 12, 2004	10.83
NOV 21	9.14	MAR 25	10.37	JUN 17	10.59	SEP 20	10.99
JAN 06, 2004	9.92	APR 27	10.19	24	10.71		

HIGHEST 9.14 NOV 21, 2003
 LOWEST 10.99 SEP 20, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ee 183. SITE ID.--392440076332002. PERMIT NUMBER.--BA-94-5897.

LOCATION.--Lat 39°24'40", long 76°33'20", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER.--Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 7.50 ft; casing diameter 2 in., to 2.00 ft, and 7.00 to 7.50 ft; screen diameter 2 in., from 2.00 to 7.00 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 221.99 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.80 ft above land surface.

REMARKS.--Minebank Run Project observation well.

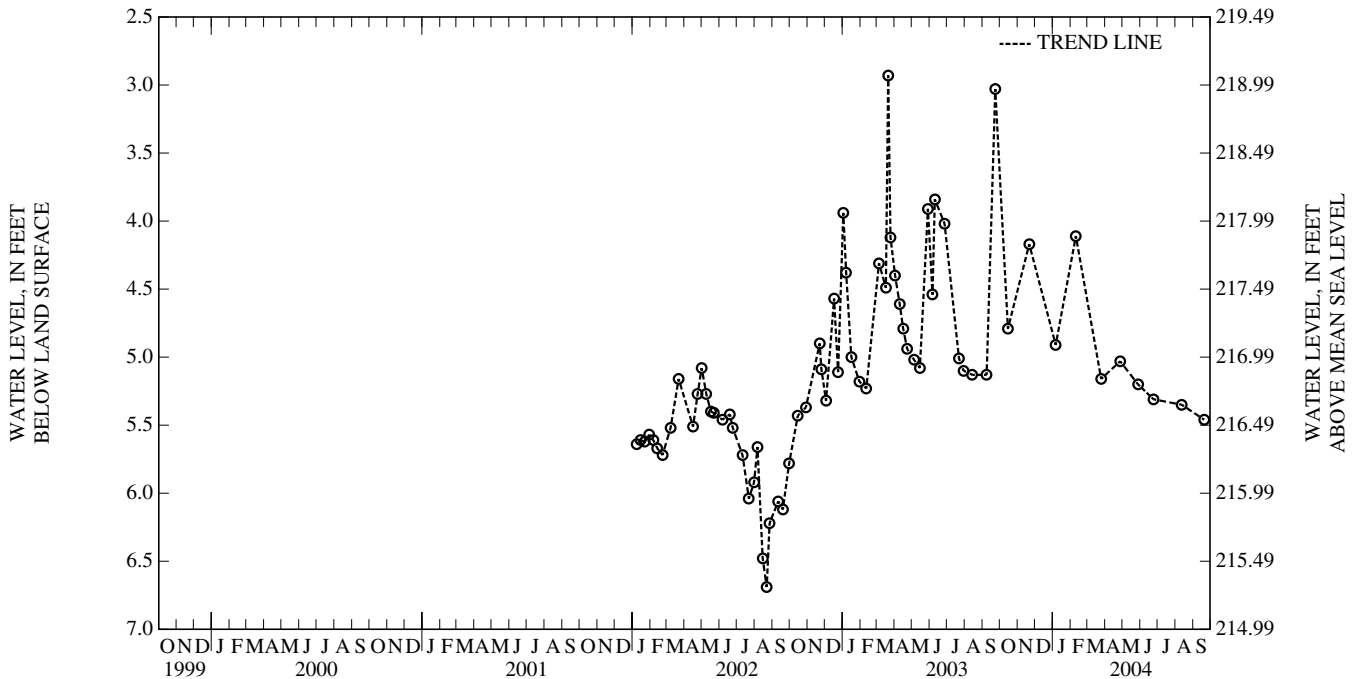
PERIOD OF RECORD.--January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.93 ft below land surface, March 21, 2003; lowest measured, 6.69 ft below land surface, August 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2003	4.79	FEB 10, 2004	4.11	MAY 28, 2004	5.20	SEP 20, 2004	5.46
NOV 21	4.17	MAR 25	5.16	JUN 24	5.31		
JAN 06, 2004	4.91	APR 27	5.03	AUG 12	5.35		

HIGHEST 4.11 FEB 10, 2004
 LOWEST 5.46 SEP 20, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ee 189. SITE ID.--392436076331901. PERMIT NUMBER.--BA-94-5882.

LOCATION.--Lat 39°24'36", long 76°33'19", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER.--Colluvium of Quaternary Age. Aquifer code: 110CLVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 24.50 ft; casing diameter 2 in., to 19.00 ft, and 24.00 to 24.50 ft; screen diameter 2 in., from 19.00 to 24.00 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 223.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.99 ft above land surface.

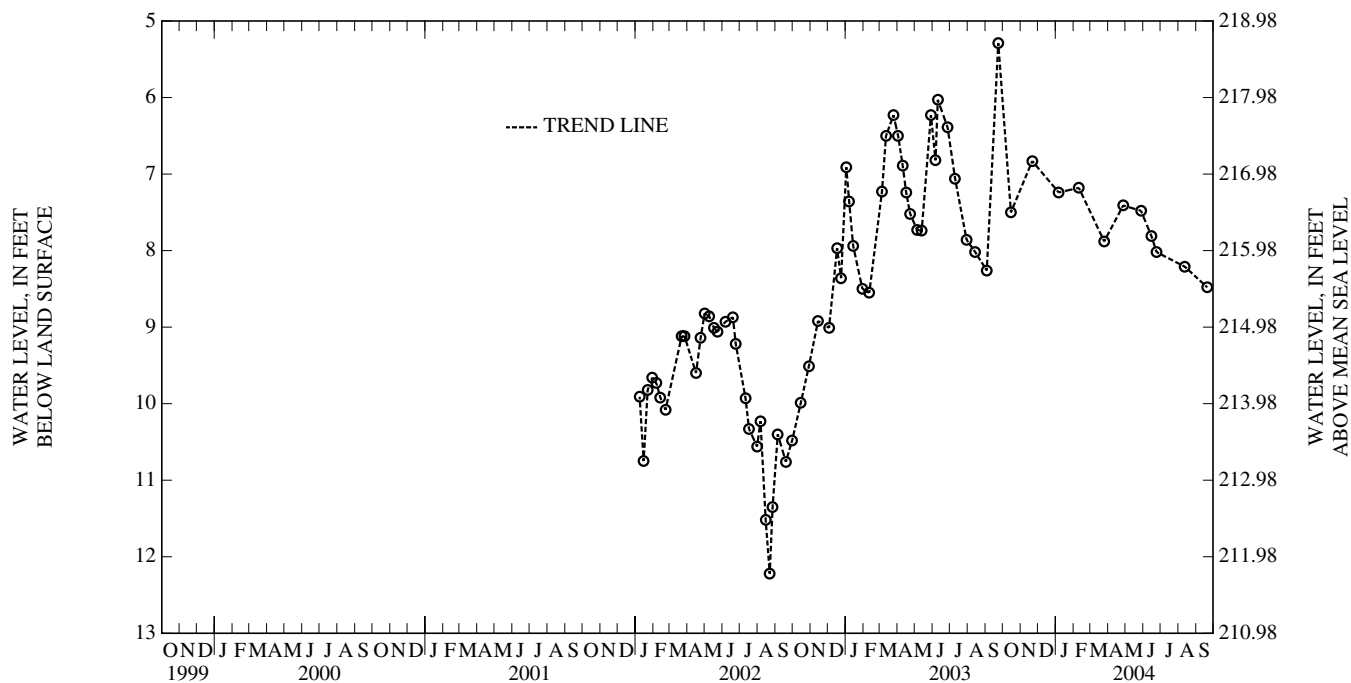
REMARKS.--Minebank Run Project observation well.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.29 ft below land surface, September 23, 2003; lowest measured, 12.22 ft below land surface, August 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2003	7.50	FEB 10, 2004	7.18	MAY 28, 2004	7.48	AUG 12, 2004	8.21
NOV 21	6.83	MAR 25	7.88	JUN 15	7.81	SEP 20	8.48
JAN 06, 2004	7.24	APR 27	7.41	24	8.02		
HIGHEST 6.83 NOV 21, 2003							
LOWEST 8.48 SEP 20, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ee 192. SITE ID.--392438076331803. PERMIT NUMBER.--BA-94-5894.

LOCATION.--Lat 39°24'38", long 76°33'18", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER.--Colluvium of Quaternary age. Aquifer code: 110CLVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 24.70 ft; casing diameter 2 in., to 19.20 ft, and 24.20 to 24.70 ft; screen diameter 2 in., from 19.20 to 24.20 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 219.43 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.85 ft above land surface.

REMARKS.--Minebank Run Project observation well, destroyed July 2004.

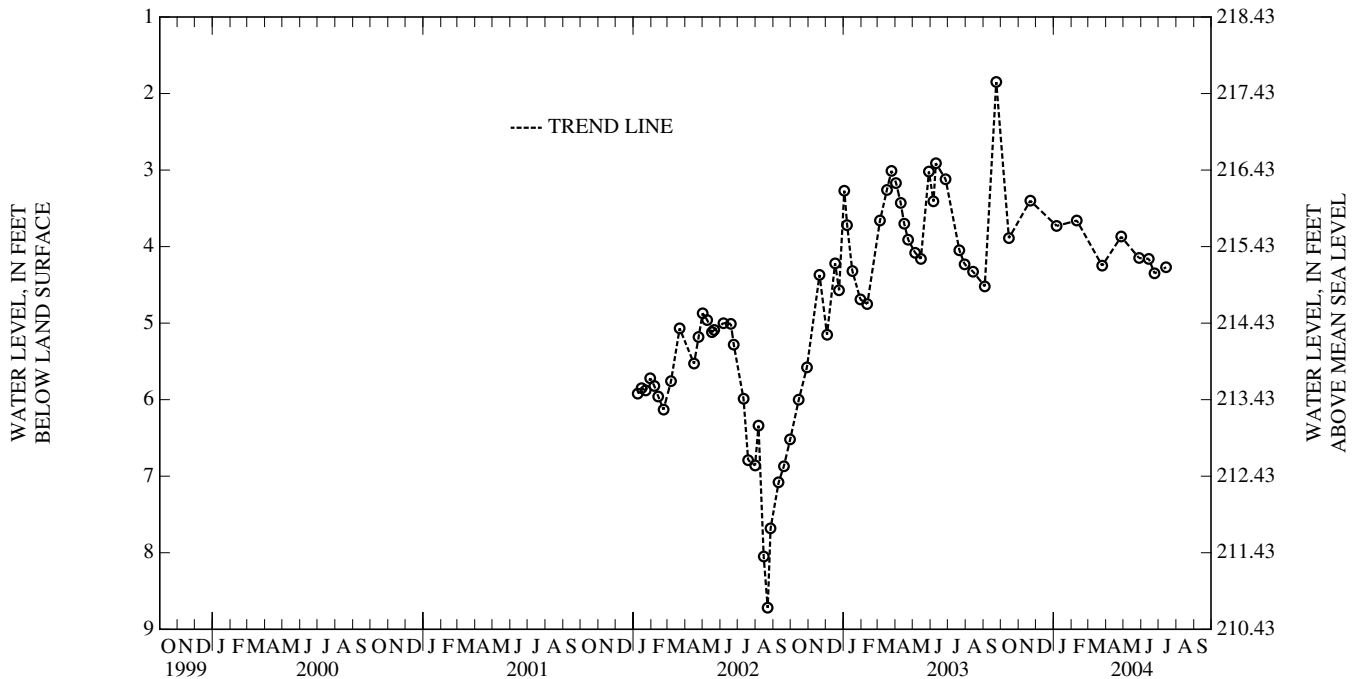
PERIOD OF RECORD.--January 2002 to July 2004.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.85 ft below land surface, September 23, 2003; lowest measured, 8.72 ft below land surface, August 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2003	3.89	FEB 10, 2004	3.66	MAY 28, 2004	4.15	JUL 14, 2004	4.27
NOV 21	3.40	MAR 25	4.25	JUN 14	4.16		
JAN 06, 2004	3.73	APR 27	3.87	24	4.35		

HIGHEST 3.40 NOV 21, 2003
 LOWEST 4.35 JUN 24, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ee 198. SITE ID.--392458076330301. PERMIT NUMBER.--BA-94-0454.

LOCATION.--Lat 39°24'58", long 76°33'03", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: Baltimore County.

AQUIFER.--Cockeysville Marble of Cambrian age. Aquifer code: 300CCKV.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 27.00 ft; casing diameter 4 in., to 6.00 ft, and 26.00 to 27.00 ft; screen diameter 4 in., from 6.00 to 26.00 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 237.66 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.22 ft above land surface.

REMARKS.--Minebank Run Project observation well.

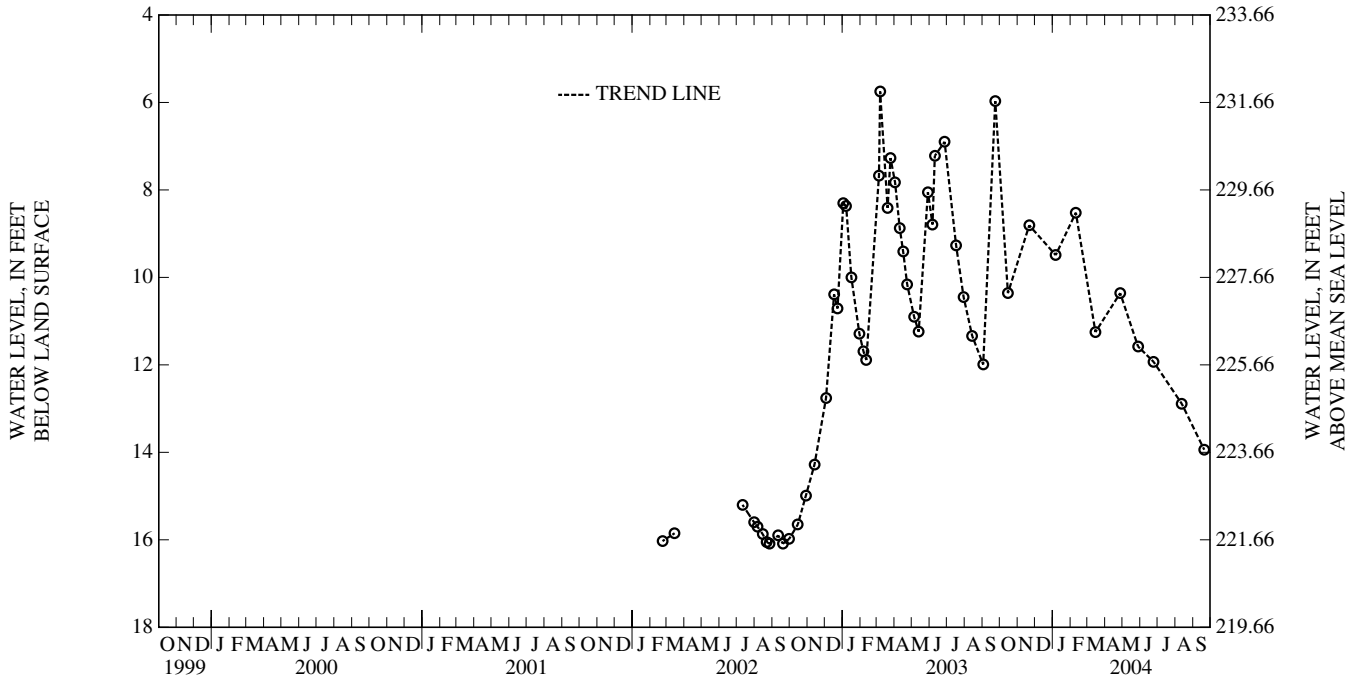
PERIOD OF RECORD.--February 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.75 ft below land surface, March 5, 2003; lowest measured, 16.09 ft below land surface, August 27, 2002 and September 19, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2003	10.36	FEB 10, 2004	8.52	MAY 28, 2004	11.58	SEP 20, 2004	13.94
NOV 21	8.81	MAR 15	11.25	JUN 24	11.93		
JAN 06, 2004	9.49	APR 27	10.36	AUG 12	12.89		

HIGHEST 8.52 FEB 10, 2004
 LOWEST 13.94 SEP 20, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Fe 19. SITE ID.--391607076312901.

LOCATION.--Lat 39°16'07", long 76°31'29", Hydrologic Unit 02060003, 0.2 mi east of Willow Spring Road, at Seagrams warehouse facility, Dundalk.
 Owner: Montebello Brands.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 402 ft; casing diameter 8 in., to unknown depth; screen length 35 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

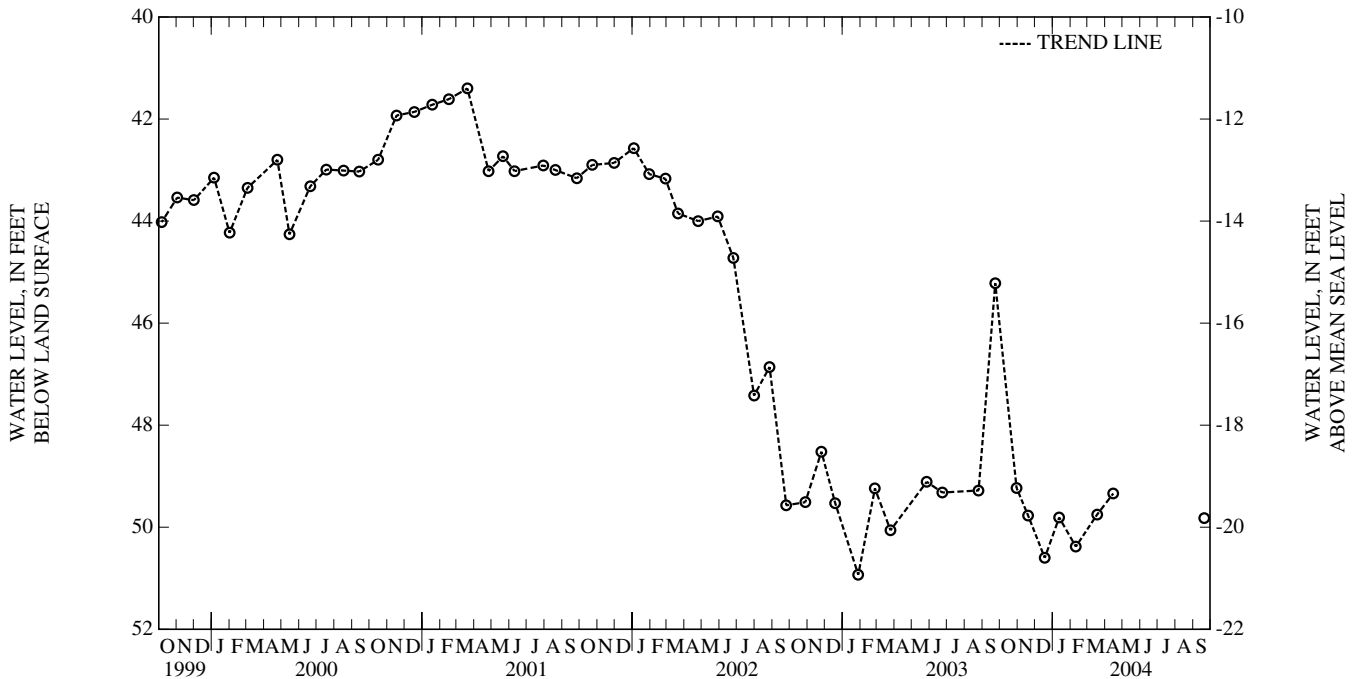
PERIOD OF RECORD.--January 1944 to March 1954, January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.40 ft below land surface, March 20, 2001; lowest measured, 97.70 ft below land surface, September 3, 1948.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	49.23	DEC 18, 2003	50.60	FEB 10, 2004	50.38	APR 15, 2004	49.34
NOV 19	49.77	JAN 12, 2004	49.81	MAR 18	49.75	SEP 20	49.82

HIGHEST 49.23 OCT 30, 2003
 LOWEST 50.60 DEC 18, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Gf 11. SITE ID.--391356076293501.

LOCATION.--Lat 39°13'56", long 76°29'35", Hydrologic Unit 02060003, near Tin Mill Rd., Sparrows Point. Owner: Bethlehem Steel Co.

AQUIFER.-- Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 645 ft; casing diameter 14 in., to 422.70 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 13.57 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.58 ft above land surface.

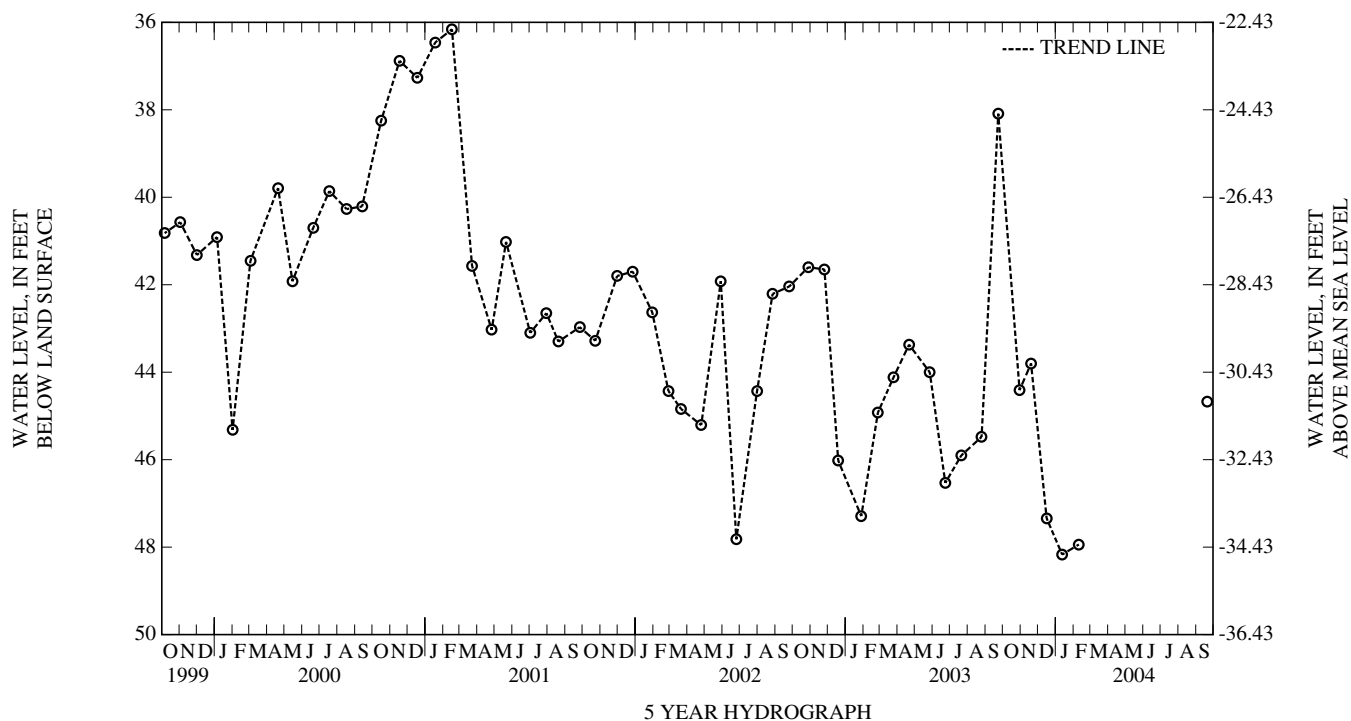
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--September 1981, March 1982, September 1982, January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.25 ft below land surface, June 3, 1983; lowest measured, 62.27 ft below land surface, October 20, 1997.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	44.41	DEC 16, 2003	47.34	FEB 10, 2004	47.94
NOV 19	43.80	JAN 12, 2004	48.17	SEP 20	44.67
HIGHEST	43.80	NOV 19, 2003			
LOWEST	48.17	JAN 12, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY

WELL NUMBER.--CA Bb 27. SITE ID.--384333076394701. PERMIT NUMBER.--CA-73-3303.

LOCATION.--Lat 38°43'33", long 76°39'47", Hydrologic Unit 02060006, at Dunkirk Regional Park, Dunkirk. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 320 ft; casing diameter 4 in., to 250 ft; casing diameter 2 in., from 250 to 310 ft; screen diameter 2 in., from 310 to 320 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder from February 2004 to current year.

DATUM.--Elevation of land surface is 137.87 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.80 ft above land surface.

REMARKS.--Calvert County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--August 1979 to current year.

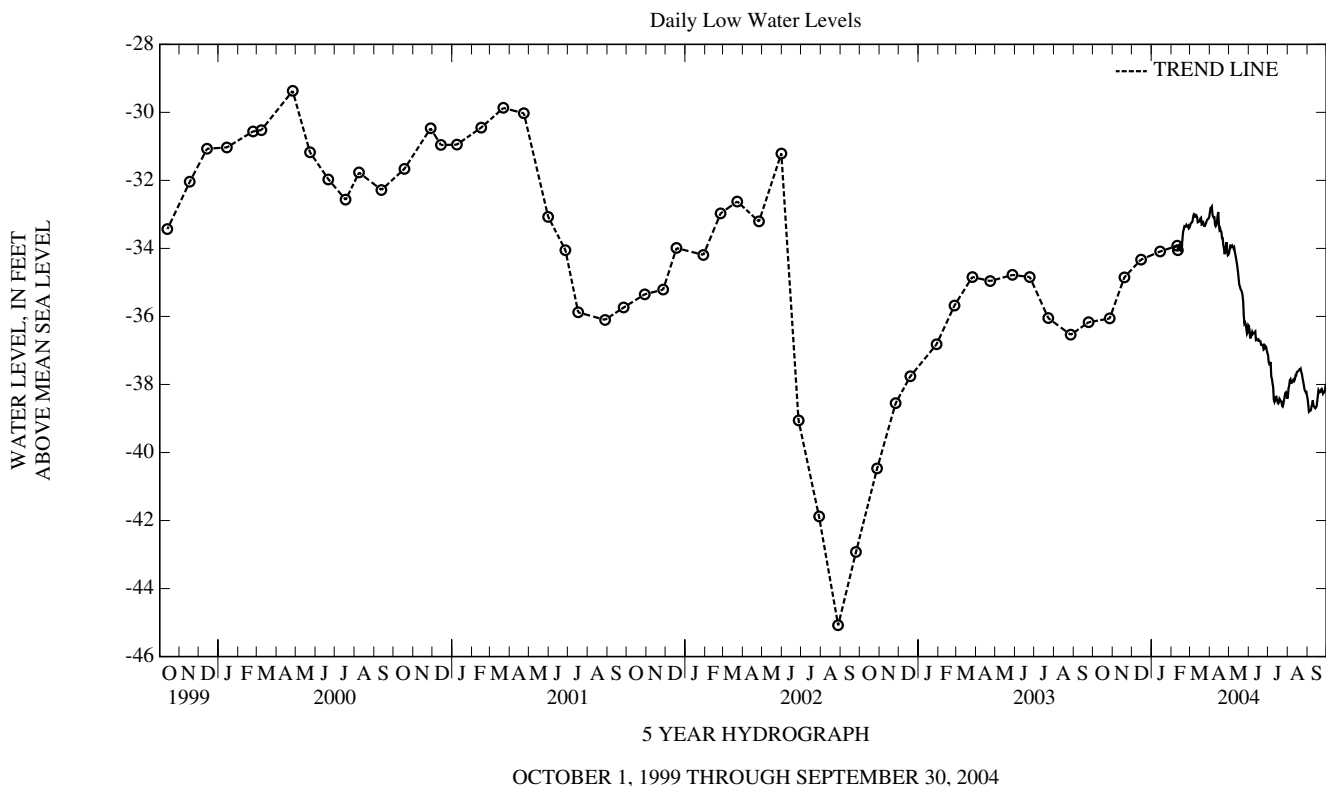
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.05 ft above sea level, May 6, 1980; lowest measured, 45.08 ft below sea level, August 28, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	-36.06	JAN 14, 2004	-34.09	MAR 16, 2004	-33.04	JUN 24, 2004	-36.70
NOV 19	-34.85	FEB 11	-33.87	APR 14	-32.87	JUL 21	-38.46
DEC 15	-34.33	23	-33.29	MAY 24	-35.54	SEP 24	-38.14
LOWEST -38.46 JUL 21, 2004							
HIGHEST -32.87 APR 14, 2004							

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	-33.23	-33.33
2	---	---	---	---	---	---	---	---	---	---	-33.10	-33.26
3	---	---	---	---	---	---	---	---	---	---	-33.17	-33.25
4	---	---	---	---	---	---	---	---	---	---	-33.08	-33.23
5	---	---	---	---	---	---	---	---	---	---	-32.98	-33.17
6	---	---	---	---	---	---	---	---	---	---	-32.84	-33.04
7	---	---	---	---	---	---	---	---	---	---	-32.86	-32.99
8	---	---	---	---	---	---	---	---	---	---	-32.84	-33.00
9	---	---	---	---	---	---	---	---	---	---	-32.93	-33.07
10	---	---	---	---	---	---	---	---	-33.70	-33.92	-33.01	-33.07
11	---	---	---	---	---	---	---	---	-33.83	-34.05	-32.92	-33.04
12	---	---	---	---	---	---	---	---	-33.81	-34.02	-32.88	-33.09
13	---	---	---	---	---	---	---	---	-33.72	-33.90	-33.08	-33.23
14	---	---	---	---	---	---	---	---	-33.66	-33.88	-33.04	-33.22
15	---	---	---	---	---	---	---	---	-33.71	-33.98	-33.03	-33.21
16	---	---	---	---	---	---	---	---	-33.76	-34.09	-33.01	-33.20
17	---	---	---	---	---	---	---	---	-33.72	-33.96	-33.00	-33.12
18	---	---	---	---	---	---	---	---	-33.49	-33.72	-33.03	-33.10
19	---	---	---	---	---	---	---	---	-33.35	-33.51	-32.96	-33.30
20	---	---	---	---	---	---	---	---	-33.25	-33.44	-33.09	-33.29
21	---	---	---	---	---	---	---	---	-33.12	-33.35	-32.96	-33.19
22	---	---	---	---	---	---	---	---	-33.28	-33.36	-33.07	-33.29
23	---	---	---	---	---	---	---	---	-33.28	-33.35	-33.21	-33.34
24	---	---	---	---	---	---	---	---	-33.16	-33.31	-33.23	-33.34
25	---	---	---	---	---	---	---	---	-33.19	-33.35	-33.19	-33.30
26	---	---	---	---	---	---	---	---	-33.25	-33.35	-33.15	-33.25
27	---	---	---	---	---	---	---	---	-33.17	-33.33	-33.00	-33.18
28	---	---	---	---	---	---	---	---	-33.26	-33.41	-33.01	-33.15
29	---	---	---	---	---	---	---	---	-33.25	-33.39	-33.05	-33.14
30	---	---	---	---	---	---	---	---	---	---	-33.03	-33.11
31	---	---	---	---	---	---	---	---	---	---	-32.93	-33.07
MONTH	---	---	---	---	---	---	---	---	-33.12	-34.09	-32.84	-33.34

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-32.69	-32.93	-33.97	-34.13	-36.07	-36.29	-36.97	-37.14	-38.11	-38.36	-38.29	-38.43
2	-32.71	-32.81	-33.83	-34.01	-36.23	-36.41	-37.01	-37.35	-38.01	-38.11	-38.40	-38.61
3	-32.70	-32.80	-33.80	-33.89	-36.35	-36.62	-37.20	-37.40	-37.87	-38.04	-38.56	-38.80
4	-32.63	-32.77	-33.82	-33.97	-36.53	-36.62	-37.26	-37.38	-37.77	-37.88	-38.68	-38.78
5	-32.72	-33.00	-33.83	-33.95	-36.36	-36.53	-37.18	-37.34	-37.75	-37.85	-38.67	-38.77
6	-32.92	-33.07	-33.88	-33.92	-36.36	-36.46	-37.29	-37.77	-37.74	-37.95	-38.57	-38.76
7	-32.91	-33.10	-33.83	-33.96	-36.39	-36.52	-37.56	-37.83	-37.83	-37.95	-38.58	-38.65
8	-32.96	-33.09	-33.90	-34.00	-36.42	-36.50	-37.65	-37.97	-37.86	-37.94	-38.41	-38.58
9	-32.96	-33.31	-33.89	-33.97	-36.39	-36.49	-37.85	-38.09	-37.82	-37.87	-38.36	-38.47
10	-33.19	-33.35	-33.94	-34.11	-36.39	-36.46	-38.00	-38.45	-37.78	-37.85	-38.42	-38.61
11	-33.19	-33.32	-34.08	-34.20	-36.37	-36.44	-38.39	-38.51	-37.79	-37.89	-38.51	-38.65
12	-33.04	-33.21	-34.17	-34.31	-36.41	-36.68	-38.34	-38.45	-37.69	-37.85	-38.53	-38.68
13	-32.88	-33.04	-34.27	-34.42	-36.58	-36.66	-38.28	-38.37	-37.62	-37.73	-38.56	-38.70
14	-32.85	-32.93	-34.37	-34.55	-36.48	-36.70	-38.23	-38.36	-37.62	-37.73	-38.61	-38.67
15	-32.91	-33.29	-34.48	-34.71	-36.61	-36.70	-38.19	-38.45	-37.59	-37.64	-38.41	-38.64
16	-33.18	-33.45	-34.68	-34.89	-36.60	-36.68	-38.33	-38.53	-37.49	-37.62	-38.29	-38.48
17	-33.22	-33.42	-34.84	-35.08	-36.58	-36.72	-38.40	-38.56	-37.51	-37.61	-38.08	-38.32
18	-33.27	-33.49	-34.99	-35.12	-36.54	-36.72	-38.37	-38.53	-37.51	-37.59	-38.00	-38.17
19	-33.35	-33.52	-35.03	-35.20	-36.50	-36.73	-38.30	-38.42	-37.45	-37.56	-38.17	-38.21
20	-33.43	-33.70	-35.12	-35.23	-36.69	-36.83	-38.31	-38.45	-37.48	-37.57	-38.20	-38.23
21	-33.56	-33.70	-35.09	-35.28	-36.73	-36.83	-38.38	-38.49	-37.45	-37.54	-38.11	-38.22
22	-33.63	-33.91	-35.13	-35.37	-36.74	-36.85	-38.41	-38.50	-37.52	-37.64	-38.07	-38.15
23	-33.73	-34.00	-35.29	-35.56	-36.76	-36.84	-38.45	-38.63	-37.56	-37.69	-38.06	-38.13
24	-33.85	-34.17	-35.49	-35.98	-36.75	-36.97	-38.55	-38.65	-37.66	-37.82	-38.08	-38.18
25	-33.93	-34.11	-35.95	-36.21	-36.72	-36.95	-38.46	-38.57	-37.77	-37.92	-38.10	-38.27
26	-33.76	-33.93	-36.10	-36.18	-36.64	-36.85	-38.35	-38.46	-37.86	-38.02	-38.12	-38.24
27	-33.69	-33.82	-36.09	-36.23	-36.83	-36.87	-38.23	-38.35	-37.94	-38.14	-38.15	-38.23
28	-33.78	-34.10	-36.12	-36.36	-36.78	-36.90	-38.13	-38.25	-37.99	-38.19	-37.91	-38.18
29	-33.93	-34.20	-36.30	-36.51	-36.83	-37.00	-38.09	-38.23	-38.08	-38.23	-37.94	-38.03
30	-34.03	-34.18	-36.26	-36.47	-36.92	-37.08	-38.16	-38.32	-38.14	-38.22	-37.92	-38.02
31	---	---	-36.07	-36.26	---	---	-38.18	-38.42	-38.15	-38.34	---	---
MONTH	-32.63	-34.20	-33.80	-36.51	-36.07	-37.08	-36.97	-38.65	-37.45	-38.36	-37.91	-38.80
YEAR	-32.63	-38.80										



CALVERT COUNTY--Continued

WELL NUMBER.--CA Bb 28. SITE ID.--384333076394702. PERMIT NUMBER.--CA-73-3721.

LOCATION.--Lat 38°43'33", long 76°39'47", Hydrologic Unit 02060006, at Dunkirk Regional Park, Dunkirk. Owner: U.S. Geological Survey.

AQUIFER.--Nanjemoy Formation of Lower Eocene age. Aquifer code: 124NNJM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 170 ft; casing diameter 4 in., to 147 ft; casing diameter 2 in., from 147 to 160 ft; screen diameter 2 in., from 160 to 170 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 138.67 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

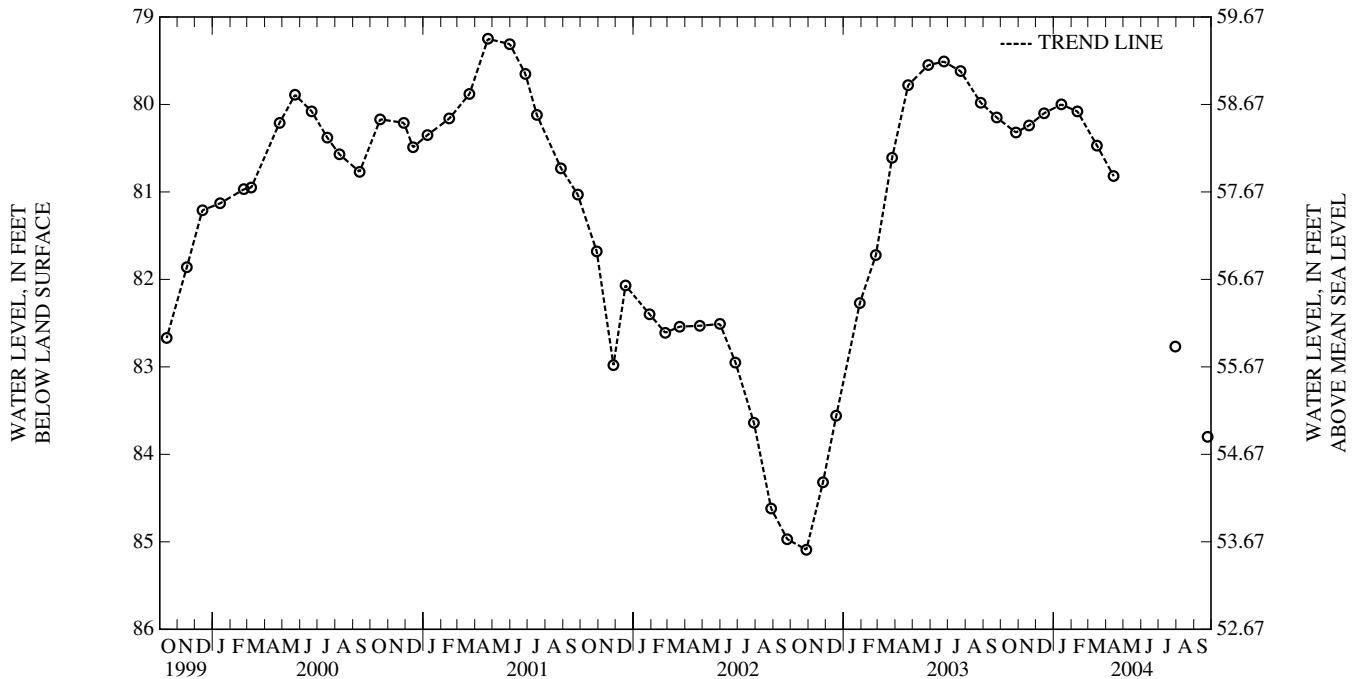
PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 76.55 ft below land surface, May 4, 1998; lowest measured, 85.09 ft below land surface, October 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	80.32	JAN 14, 2004	80.00	APR 14, 2004	80.82
NOV 19	80.24	FEB 11	80.08	JUL 30	82.77
DEC 15	80.10	MAR 16	80.47	SEP 24	83.80

HIGHEST 80.00 JAN 14, 2004
 LOWEST 83.80 SEP 24, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Bc 25. SITE ID.--384114076320301. PERMIT NUMBER.--CA-67-0011.

LOCATION.--Lat 38°41'14", long 76°32'03", Hydrologic Unit 02060004, at Chesapeake Beach Park, Chesapeake Beach. Owner: Chesapeake Beach Park, Inc.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 365 ft; casing diameter 8 in., to 333.4 ft; screen diameter 8 in., from 333.4 to 365 ft.

INSTRUMENTATION.--Monthly water level measurements from September 1999 to current year. Twice yearly water level measurements from June 1993 to September 1999 with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 17.77 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of reducer, 3.50 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

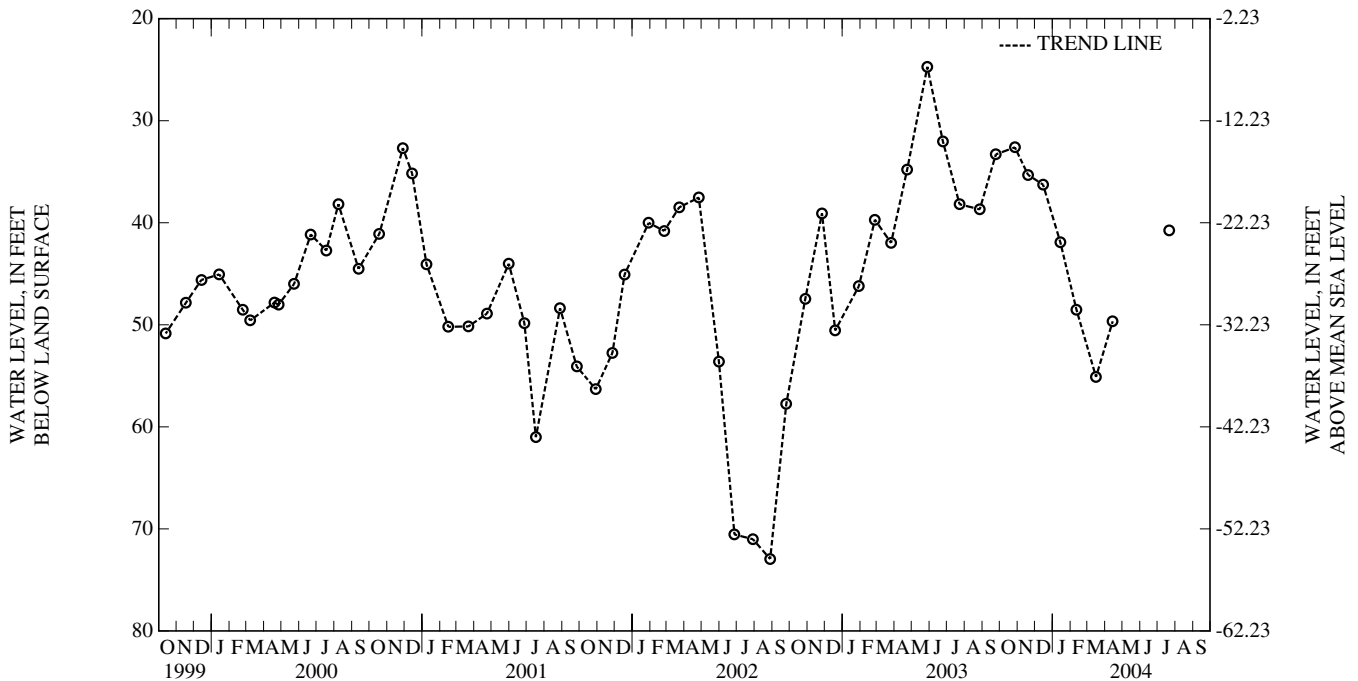
PERIOD OF RECORD.--April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.72 ft below land surface, May 28, 2003; lowest measured, 72.95 ft below land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	32.61	DEC 15, 2003	36.26	FEB 11, 2004	48.51	APR 14, 2004	49.66
NOV 19	35.31	JAN 14, 2004	41.90	MAR 16	55.11	JUL 21	40.75

HIGHEST 32.61 OCT 27, 2003
 LOWEST 55.11 MAR 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Cc 18. SITE ID.--383940076314801.

LOCATION.--Lat 38°39'40", long 76°31'48", Hydrologic Unit 02060004, at Naval Research Laboratory, Randle Cliff. Owner: U.S.Navy.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 476 ft; casing diameter 6 in., to 462 ft; screened from 462 to 476 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder September 1958 to December 1962.

DATUM.--Elevation of land surface is 111.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.30 ft above land surface.

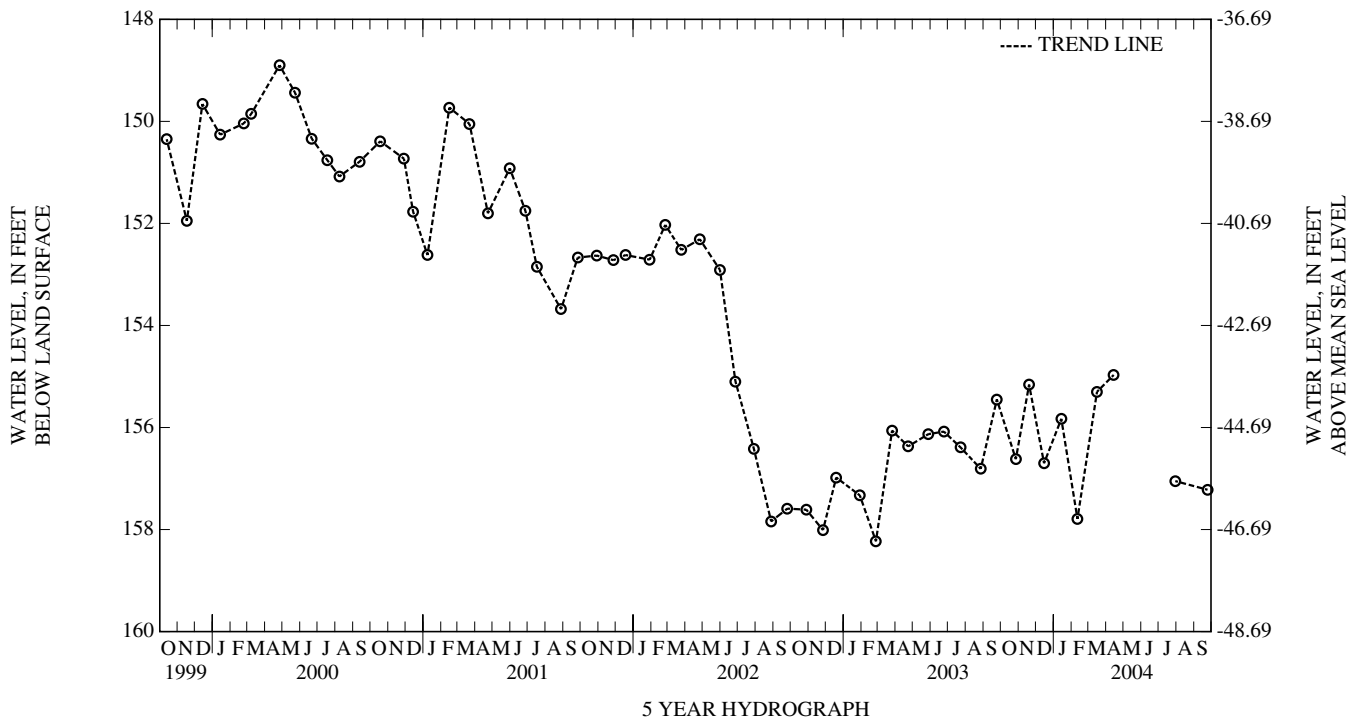
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. A water level measurement of 76.68 ft below land surface, was made on September 10, 1952. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--September 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 103.97 ft below land surface, December 23, 1959; lowest measured, 158.23 ft below land surface, February 26, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	156.62	JAN 14, 2004	155.83	APR 14, 2004	154.97
NOV 19	155.16	FEB 11	157.79	JUL 30	157.05
DEC 15	156.70	MAR 16	155.30	SEP 24	157.22
HIGHEST 154.97 APR 14, 2004					
LOWEST 157.79 FEB 11, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Cc 57. SITE ID.--383605076344601. PERMIT NUMBER.--CA-73-2893.

LOCATION.--Lat 38°36'05", long 76°34'46", Hydrologic Unit 02060006, Cox Rd. near MD Rt. 263, Huntingtown. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 579 ft; casing diameter 4 in., to 211 ft; casing diameter 2 in., from 211 to 511 ft, and 521 to 579 ft; screen diameter 3 in., from 511 to 521 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 138.60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.66 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

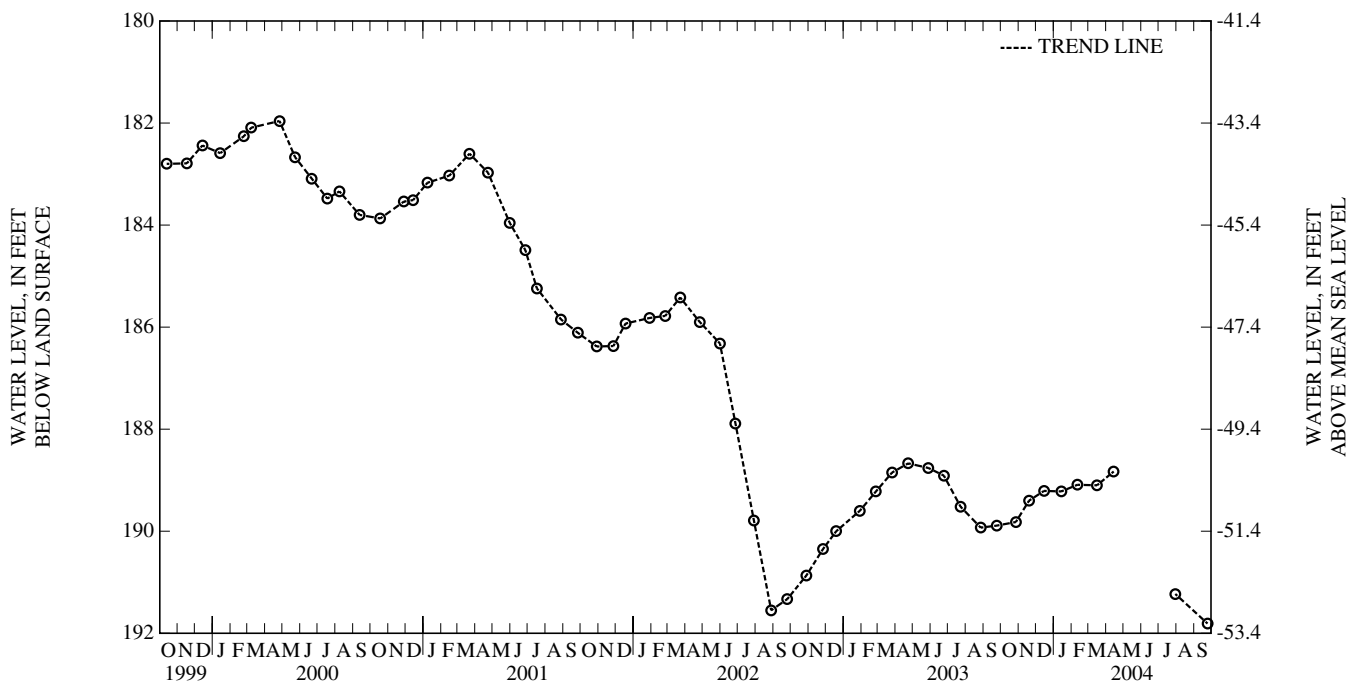
PERIOD OF RECORD.--December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 140.00 ft below land surface, March 7, 1979; lowest measured, 191.81 ft below land surface, September 24, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	189.82	JAN 14, 2004	189.22	APR 14, 2004	188.83
NOV 19	189.40	FEB 11	189.09	JUL 30	191.23
DEC 15	189.21	MAR 16	189.10	SEP 24	191.81

HIGHEST 188.83 APR 14, 2004
LOWEST 191.81 SEP 24, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Db 47. SITE ID.--383239076354201. PERMIT NUMBER.--CA-73-3304.

LOCATION.--Lat 38°32'39", long 76°35'42", Hydrologic Unit 02060006, Prince Frederick. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 570 ft; casing diameter 4 in., to 483 ft; casing diameter 2 in., from 483 to 560 ft; screen diameter 2 in., from 560 to 570 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder from February 2004 to current year.

DATUM.--Elevation of land surface is 140.4ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.20 ft above land surface.

REMARKS.--Calvert County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--July 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.14 ft below sea level, July 31, 1979; lowest measured, 65.36 ft below sea level, July 22, 2004 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	-63.02	FEB 11, 2004	-61.71	MAR 03, 2004	-61.98	JUN 24, 2004	-63.95
NOV 19	-62.66	12	-62.32	16	-61.75	JUL 08	-64.05
DEC 15	-62.43	13	-61.98	APR 14	-61.41	21	-65.30
JAN 14, 2004	-61.62	23	-61.97	MAY 24	-63.50	SEP 24	-65.03

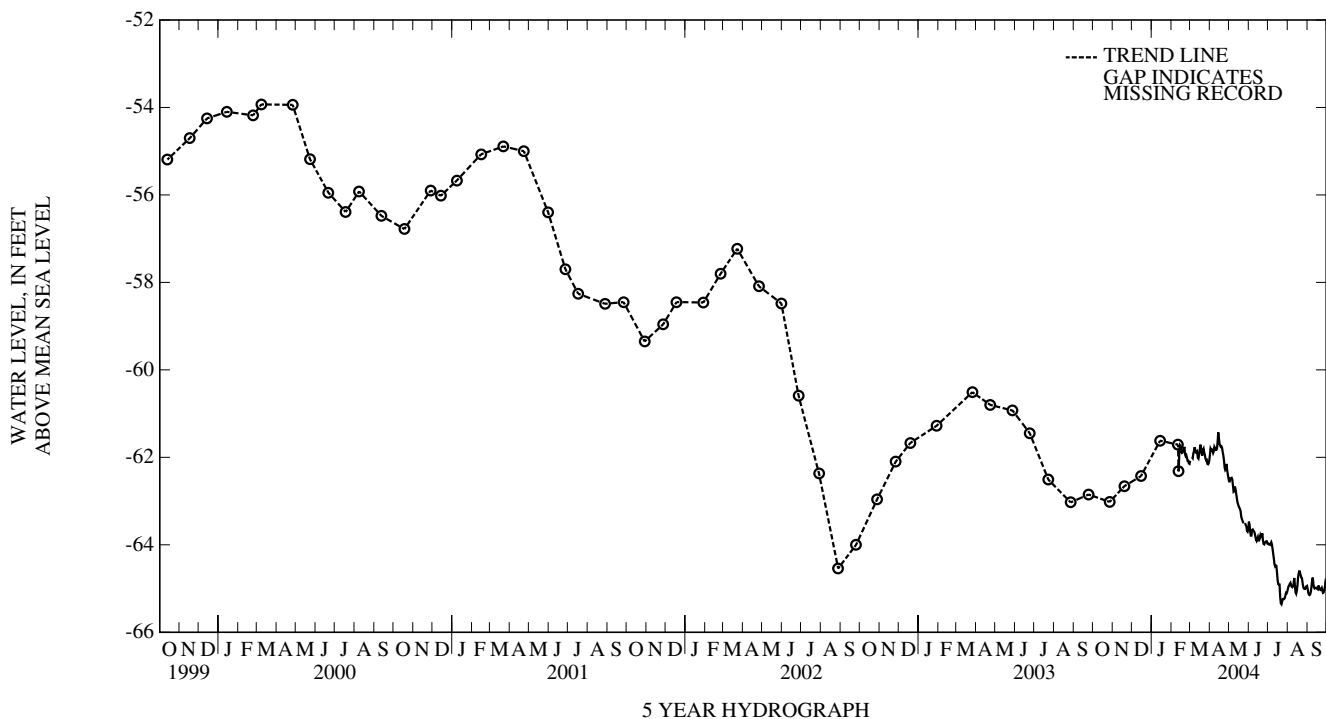
LOWEST -65.30 JUL 21, 2004
 HIGHEST -61.41 APR 14, 2004

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH										
1	---	---	---	---	---	---	---	---	---	---	---	---	-61.99	-62.08		
2	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
3	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
4	---	---	---	---	---	---	---	---	---	---	---	---	-61.97	-62.00		
5	---	---	---	---	---	---	---	---	---	---	---	---	-61.91	-62.02		
6	---	---	---	---	---	---	---	---	---	---	---	---	-61.79	-61.91		
7	---	---	---	---	---	---	---	---	---	---	---	---	-61.77	-61.86		
8	---	---	---	---	---	---	---	---	---	---	---	---	-61.72	-61.77		
9	---	---	---	---	---	---	---	---	---	---	---	---	-61.74	-61.82		
10	---	---	---	---	---	---	---	---	---	---	---	---	-61.82	-61.89		
11	---	---	---	---	---	---	---	---	---	---	---	---	-61.83	-61.89		
12	---	---	---	---	---	---	---	---	---	---	---	---	-61.81	-61.87		
13	---	---	---	---	---	---	---	---	---	---	---	---	-61.86	-62.01		
14	---	---	---	---	---	---	---	---	---	-61.71	-61.90	---	-61.86	-62.01		
15	---	---	---	---	---	---	---	---	---	-61.68	-61.72	---	-61.94	-62.03		
16	---	---	---	---	---	---	---	---	---	-61.68	-61.74	---	-61.85	-61.94		
17	---	---	---	---	---	---	---	---	---	-61.74	-61.87	---	-61.68	-61.85		
18	---	---	---	---	---	---	---	---	---	-61.87	-61.90	---	-61.67	-61.71		
19	---	---	---	---	---	---	---	---	---	-61.82	-61.89	---	-61.71	-61.78		
20	---	---	---	---	---	---	---	---	---	-61.78	-61.82	---	-61.76	-61.90		
21	---	---	---	---	---	---	---	---	---	-61.73	-61.82	---	-61.83	-61.96		
22	---	---	---	---	---	---	---	---	---	-61.70	-61.76	---	-61.73	-61.83		
23	---	---	---	---	---	---	---	---	---	-61.76	-61.93	---	-61.74	-61.80		
24	---	---	---	---	---	---	---	---	---	-61.92	-61.97	---	-61.80	-61.89		
25	---	---	---	---	---	---	---	---	---	-61.90	-61.95	---	-61.88	-61.94		
26	---	---	---	---	---	---	---	---	---	-61.91	-62.01	---	-61.94	-62.03		
27	---	---	---	---	---	---	---	---	---	-62.01	-62.08	---	-62.03	-62.07		
28	---	---	---	---	---	---	---	---	---	-62.07	-62.08	---	-62.05	-62.06		
29	---	---	---	---	---	---	---	---	---	-62.08	-62.14	---	-62.05	-62.15		
30	---	---	---	---	---	---	---	---	---	-62.08	-62.15	---	-62.14	-62.16		
31	---	---	---	---	---	---	---	---	---	---	---	---	-62.07	-62.14		
MONTH	---	---	---	---	---	---	---	---	---	---	---	---	-61.94	-62.07		
MONTH	---	---	---	---	---	---	---	---	---	-61.68	-62.15	---	-61.67	-62.16		

CALVERT COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-61.77	-61.94	-62.48	-62.55	-63.43	-63.47	-63.96	-63.97	-64.95	-65.01	-64.94	-65.01
2	-61.77	-61.80	-62.48	-62.55	-63.43	-63.54	-63.96	-63.99	-64.93	-64.95	-65.01	-65.10
3	-61.80	-61.83	-62.43	-62.48	-63.54	-63.69	-63.98	-63.99	-64.89	-64.93	-65.10	-65.14
4	-61.79	-61.82	-62.44	-62.48	-63.69	-63.79	-63.97	-64.00	-64.87	-64.89	-65.12	-65.15
5	-61.80	-61.85	-62.43	-62.47	-63.66	-63.79	-63.92	-63.97	-64.86	-64.87	-65.07	-65.13
6	-61.85	-61.90	-62.43	-62.51	-63.64	-63.66	-63.91	-63.94	-64.87	-64.93	-64.95	-65.07
7	-61.76	-61.86	-62.51	-62.64	-63.64	-63.65	-63.94	-63.99	-64.93	-64.96	-64.81	-64.95
8	-61.73	-61.76	-62.64	-62.79	-63.65	-63.68	-63.99	-64.09	-64.95	-64.97	-64.73	-64.81
9	-61.73	-61.79	-62.67	-62.78	-63.67	-63.69	-64.09	-64.20	-64.88	-64.95	-64.71	-64.75
10	-61.79	-61.83	-62.60	-62.67	-63.67	-63.73	-64.20	-64.31	-64.76	-64.88	-64.75	-64.90
11	-61.81	-61.83	-62.61	-62.72	-63.73	-63.80	-64.31	-64.44	-64.72	-64.76	-64.90	-64.98
12	-61.65	-61.81	-62.72	-62.82	-63.80	-63.88	-64.44	-64.49	-64.75	-64.92	-64.98	-65.00
13	-61.43	-61.65	-62.82	-62.92	-63.86	-63.91	-64.44	-64.47	-64.92	-65.09	-64.97	-64.99
14	-61.40	-61.43	-62.92	-63.02	-63.78	-63.86	-64.44	-64.48	-65.05	-65.12	-64.96	-64.98
15	-61.42	-61.56	-63.02	-63.07	-63.77	-63.82	-64.48	-64.64	-64.93	-65.05	-64.98	-64.99
16	-61.56	-61.69	-63.06	-63.12	-63.82	-63.90	-64.64	-64.81	-64.74	-64.93	-64.99	-65.01
17	-61.69	-61.73	-63.12	-63.15	-63.85	-63.90	-64.81	-64.90	-64.65	-64.74	-64.93	-65.02
18	-61.73	-61.76	-63.14	-63.18	-63.78	-63.85	-64.88	-64.91	-64.58	-64.65	-64.87	-64.93
19	-61.71	-61.75	-63.17	-63.23	-63.76	-63.78	-64.87	-64.91	-64.58	-64.59	-64.90	-65.00
20	-61.71	-61.78	-63.23	-63.36	-63.77	-63.82	-64.91	-65.20	-64.59	-64.64	-65.00	-65.02
21	-61.78	-61.88	-63.36	-63.41	-63.74	-63.81	-65.20	-65.34	-64.64	-64.69	-64.99	-65.03
22	-61.88	-61.96	-63.41	-63.45	-63.69	-63.74	-65.30	-65.36	-64.69	-64.75	-64.96	-65.00
23	-61.96	-62.07	-63.45	-63.49	-63.70	-63.90	-65.22	-65.30	-64.74	-64.76	-64.95	-64.98
24	-62.07	-62.23	-63.41	-63.50	-63.90	-63.98	-65.22	-65.24	-64.76	-64.87	-64.98	-65.05
25	-62.23	-62.29	---	---	-63.95	-63.99	-65.23	-65.24	-64.87	-64.96	-65.05	-65.10
26	-62.15	-62.27	-63.49	-63.50	-63.90	-63.95	-65.22	-65.24	-64.96	-65.00	-65.04	-65.09
27	-62.10	-62.15	-63.50	-63.55	-63.91	-63.94	-65.17	-65.22	-64.98	-65.01	-64.96	-65.04
28	-62.12	-62.30	-63.55	-63.58	-63.86	-63.92	-65.08	-65.17	-64.97	-65.01	-64.78	-64.96
29	-62.30	-62.39	-63.58	-63.68	-63.86	-63.92	-65.07	-65.10	-64.95	-64.97	-64.78	-64.84
30	-62.39	-62.48	-63.64	-63.70	-63.92	-63.97	-65.07	-65.11	-64.89	-64.95	-64.84	-64.87
31	---	---	-63.47	-63.64	---	---	-65.01	-65.07	-64.88	-64.94	---	---
MONTH	-61.40	-62.48	-62.43	-63.70	-63.43	-63.99	-63.91	-65.36	-64.58	-65.12	-64.71	-65.15
YEAR	-61.40	-65.36										

Daily Low Water Levels



CALVERT COUNTY--Continued

WELL NUMBER.--CA Db 65. SITE ID.--383216076351401. PERMIT NUMBER.--CA-81-2415.

LOCATION.--Lat 38°32'16", long 76°35'14", Hydrologic Unit 02060006, at St. Paul's Episcopal Church parking lot, Prince Frederick. Owner: U.S. Geological Survey.

AQUIFER.--Brandywine Formation of Pliocene age. Aquifer code: 112UPLD.

WELL CHARACTERISTICS.--Drilled, water-table, observation well, depth 49 ft; casing diameter 3 in., to 22 ft, and 32 to 49 ft; screen diameter 3 in., from 22 to 32 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 159.33 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of PVC casing, 2.38 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. The water level measurement of 17.42 ft below land surface, on August 24, 1999, was made after a heavy rain shower earlier in the day.

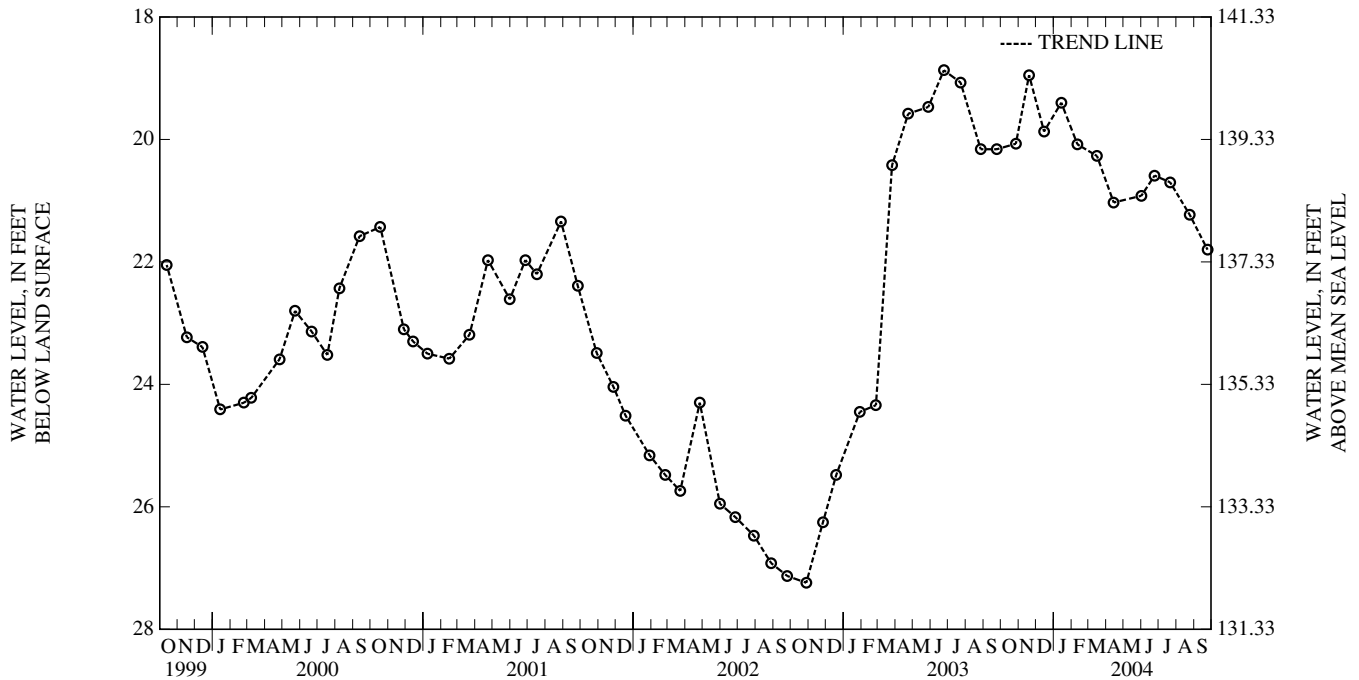
PERIOD OF RECORD.--July and August 1986, October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.64 ft below land surface, May 9, 1990; lowest measured, 27.24 ft below land surface, October 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	20.07	JAN 14, 2004	19.40	APR 14, 2004	21.03	JUL 21, 2004	20.70
NOV 19	18.95	FEB 11	20.08	JUN 01	20.92	AUG 24	21.23
DEC 15	19.87	MAR 16	20.27	24	20.59	SEP 24	21.80

HIGHEST 18.95 NOV 19, 2003
 LOWEST 21.80 SEP 24, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Db 96. SITE ID.--383244076354201. PERMIT NUMBER.--CA-94-4191.

LOCATION.--Lat 38°32'44", long 76°35'42", Hydrologic Unit 02060006. Owner: Maryland Geological Survey.

AQUIFER.--Upper Patapsco Aquifer Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, confined observation well, depth 970 ft; casing diameter 4 in., to 970 ft. depth.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, March 2003 to current year.

DATUM.--Elevation of land surface is 151.56 ft above North American Vertical Datum of 1988. Measuring point: Top of shelter platform, 3.00 ft above land surface.

REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels affected by nearby pumping.

PERIOD OF RECORD.--March 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.08 ft below sea level, April 12, 2003 (recorder); lowest measured, 37.24 ft below land surface, Sept. 24, 2004 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

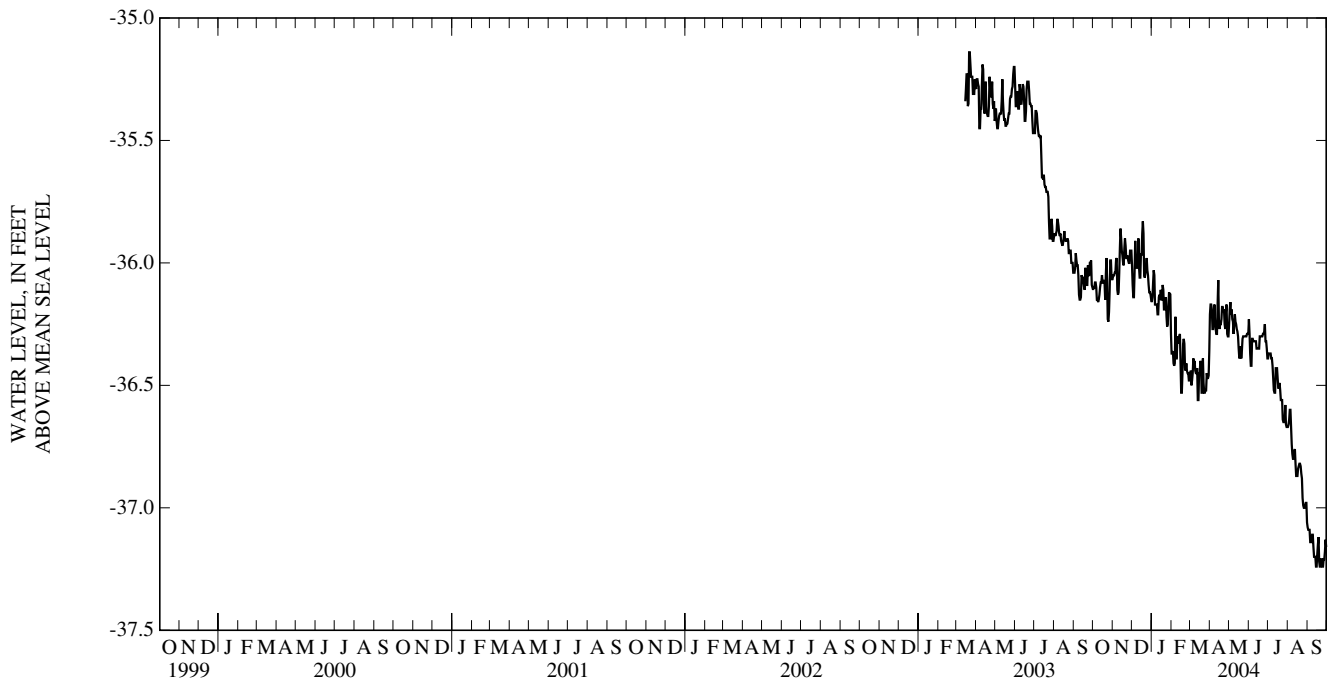
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	-35.93	JAN 14, 2004	-36.15	APR 14, 2004	-36.02	JUL 21, 2004	-36.56
NOV 19	-35.73	FEB 11	-36.32	MAY 24	-36.30	SEP 24	-37.24
DEC 15	-35.91	MAR 16	-36.32	JUN 24	-36.28		
	LOWEST -37.24	SEP 24, 2004					
	HIGHEST -35.73	NOV 19, 2003					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	-36.10	-36.11	-36.04	-36.06	-35.91	-36.01	-36.11	-36.16	-36.29	-36.37	-36.44	-36.47
2	-36.09	-36.10	-36.04	-36.05	-36.01	-36.09	-36.07	-36.14	-36.36	-36.37	-36.38	-36.44
3	-36.08	-36.10	-36.04	-36.05	-36.09	-36.14	-36.02	-36.08	-36.15	-36.36	-36.44	-36.50
4	-36.01	-36.08	-36.03	-36.04	-36.04	-36.14	-36.00	-36.03	-36.23	-36.41	-36.42	-36.48
5	-36.03	-36.08	-35.99	-36.04	-35.86	-36.04	-35.98	-36.05	-36.41	-36.42	-36.34	-36.45
6	-36.08	-36.10	-35.89	-35.99	-35.86	-35.91	-36.05	-36.17	-36.06	-36.41	-36.24	-36.39
7	-36.09	-36.15	-35.91	-35.98	-35.91	-35.98	-36.16	-36.17	-36.04	-36.22	-36.27	-36.41
8	-36.15	-36.15	-35.98	-36.11	-35.98	-36.02	-36.15	-36.17	-36.22	-36.39	-36.29	-36.40
9	-36.15	-36.16	-36.11	-36.13	-36.01	-36.02	-36.15	-36.17	-36.30	-36.39	-36.40	-36.44
10	-36.13	-36.15	-36.04	-36.12	-35.74	-36.01	-36.17	-36.21	-36.22	-36.30	-36.44	-36.45
11	-36.10	-36.13	-35.94	-36.04	-35.64	-35.90	-36.14	-36.21	-36.22	-36.32	-36.35	-36.45
12	-36.04	-36.10	-35.75	-35.94	-35.90	-36.02	-36.07	-36.14	-36.30	-36.33	-36.35	-36.43
13	-36.06	-36.08	-35.73	-35.86	-36.02	-36.06	-36.05	-36.13	-36.29	-36.30	-36.43	-36.56
14	-35.84	-36.08	-35.86	-35.90	-35.75	-36.06	-35.96	-36.15	-36.25	-36.29	-36.44	-36.56
15	-35.83	-36.05	-35.90	-35.95	-35.75	-35.96	-35.96	-36.11	-36.25	-36.41	-36.43	-36.45
16	-36.05	-36.08	-35.95	-35.97	-35.88	-35.97	-36.11	-36.15	-36.41	-36.53	-36.27	-36.45
17	-36.07	-36.08	-35.97	-36.00	-35.74	-35.88	-36.09	-36.15	-36.45	-36.53	-36.32	-36.40
18	-36.05	-36.07	-35.94	-36.01	-35.79	-35.83	-35.84	-36.09	-36.33	-36.45	-36.39	-36.41
19	-36.05	-36.08	-35.71	-35.94	-35.83	-35.88	-35.99	-36.11	-36.28	-36.33	-36.35	-36.53
20	-36.05	-36.15	-35.73	-35.90	-35.88	-36.05	-36.11	-36.19	-36.17	-36.31	-36.27	-36.53
21	-35.91	-36.05	-35.89	-35.93	-36.03	-36.06	-36.15	-36.19	-36.16	-36.33	-36.26	-36.39
22	-35.91	-35.98	-35.93	-35.98	-36.00	-36.04	-36.01	-36.15	-36.33	-36.43	-36.39	-36.49
23	-35.98	-36.07	-35.97	-35.98	-35.98	-36.02	-36.11	-36.14	-36.41	-36.44	-36.49	-36.53
24	-36.07	-36.23	-35.82	-35.97	-35.83	-35.98	-36.09	-36.22	-36.36	-36.41	-36.51	-36.53
25	-36.20	-36.24	-35.95	-35.99	-35.95	-36.03	-36.22	-36.26	-36.37	-36.44	-36.52	-36.52
26	-36.11	-36.20	-35.99	-36.00	-36.03	-36.05	-36.18	-36.25	-36.44	-36.45	-36.45	-36.52
27	-35.93	-36.11	-35.95	-36.00	-36.04	-36.09	-36.02	-36.18	-36.44	-36.45	-36.42	-36.45
28	-35.95	-35.99	-35.69	-35.95	-36.09	-36.12	-36.03	-36.12	-36.45	-36.48	-36.42	-36.47
29	-35.86	-35.99	-35.75	-35.95	-36.00	-36.12	-36.12	-36.13	-36.47	-36.48	-36.46	-36.47
30	-35.99	-36.06	-35.91	-35.95	-35.96	-36.13	-36.08	-36.13	---	---	-36.36	-36.46
31	-36.06	-36.07	---	---	-36.11	-36.15	-36.13	-36.29	---	---	-36.21	-36.36
MONTH	-35.83	-36.24	-35.69	-36.13	-35.64	-36.15	-35.84	-36.29	-36.04	-36.53	-36.21	-36.56

CALVERT COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-36.09	-36.21	-36.19	-36.25	-36.23	-36.23	-36.37	-36.39	-36.66	-36.67	-37.06	-37.08
2	-36.11	-36.17	-36.11	-36.19	-36.23	-36.29	-36.37	-36.37	-36.64	-36.66	-37.08	-37.09
3	-36.15	-36.17	-36.11	-36.16	-36.29	-36.37	-36.37	-36.37	-36.60	-36.64	-37.09	-37.09
4	-36.07	-36.19	-36.14	-36.21	-36.37	-36.42	-36.37	-36.37	-36.60	-36.60	-37.09	-37.09
5	-36.19	-36.27	-36.15	-36.19	-36.31	-36.42	-36.37	-36.37	-36.60	-36.60	-37.09	-37.14
6	-36.23	-36.27	-36.17	-36.23	-36.31	-36.31	-36.37	-36.39	-36.60	-36.67	-37.14	-37.14
7	-36.17	-36.23	-36.19	-36.24	-36.31	-36.31	-36.39	-36.39	-36.67	-36.74	-37.11	-37.14
8	-36.16	-36.17	-36.20	-36.29	-36.31	-36.32	-36.39	-36.42	-36.74	-36.78	-37.05	-37.11
9	-36.17	-36.24	-36.21	-36.25	-36.32	-36.32	-36.42	-36.47	-36.78	-36.80	-37.04	-37.11
10	-36.24	-36.27	-36.21	-36.21	-36.32	-36.32	-36.47	-36.52	-36.77	-36.80	-37.11	-37.16
11	-36.26	-36.29	-36.21	-36.24	-36.32	-36.32	-36.52	-36.53	-36.76	-36.77	-37.16	-37.20
12	-36.17	-36.29	-36.24	-36.25	-36.32	-36.32	-36.43	-36.53	-36.76	-36.76	-37.20	-37.20
13	-35.99	-36.17	-36.25	-36.27	-36.32	-36.35	-36.43	-36.43	-36.76	-36.82	-37.20	-37.20
14	-36.02	-36.07	-36.27	-36.28	-36.35	-36.35	-36.36	-36.43	-36.82	-36.87	-37.20	-37.24
15	-36.07	-36.23	-36.27	-36.30	-36.35	-36.35	-36.36	-36.43	-36.84	-36.87	-37.19	-37.24
16	-36.23	-36.27	-36.30	-36.35	-36.35	-36.35	-36.43	-36.47	-36.83	-36.87	-37.15	-37.19
17	-36.19	-36.25	-36.35	-36.39	-36.30	-36.35	-36.47	-36.51	-36.83	-36.84	-37.01	-37.15
18	-36.22	-36.25	-36.31	-36.38	-36.30	-36.30	-36.49	-36.51	-36.82	-36.83	-36.98	-37.12
19	-36.15	-36.23	-36.31	-36.34	-36.30	-36.30	-36.49	-36.49	-36.82	-36.82	-37.12	-37.22
20	-36.15	-36.18	-36.34	-36.39	-36.30	-36.30	-36.49	-36.52	-36.82	-36.82	-37.22	-37.24
21	-36.15	-36.18	-36.31	-36.36	-36.30	-36.30	-36.52	-36.56	-36.80	-36.83	-37.21	-37.24
22	-36.16	-36.20	-36.30	-36.31	-36.29	-36.30	-36.54	-36.56	-36.83	-36.86	-37.21	-37.21
23	-36.18	-36.19	-36.29	-36.30	-36.29	-36.29	-36.54	-36.56	-36.86	-36.88	-37.21	-37.21
24	-36.19	-36.25	-36.29	-36.30	-36.28	-36.29	-36.56	-36.64	-36.88	-36.96	-37.21	-37.24
25	-36.20	-36.27	-36.30	-36.30	-36.25	-36.28	-36.64	-36.65	-36.96	-36.99	-37.20	-37.24
26	-36.12	-36.20	-36.30	-36.30	-36.24	-36.25	-36.64	-36.65	-36.99	-37.00	-37.19	-37.21
27	-36.08	-36.17	-36.30	-36.30	-36.25	-36.32	-36.58	-36.64	-36.99	-37.00	-37.18	-37.21
28	-36.17	-36.29	-36.22	-36.30	-36.32	-36.32	-36.58	-36.58	-36.97	-36.99	-37.00	-37.18
29	-36.29	-36.30	-36.22	-36.29	-36.32	-36.35	-36.58	-36.66	-36.97	-36.98	-37.02	-37.13
30	-36.24	-36.30	-36.29	-36.29	-36.35	-36.39	-36.65	-36.67	-36.97	-36.98	-37.12	-37.16
31	---	---	-36.23	-36.29	---	---	-36.67	-36.67	-36.97	-37.06	---	---
MONTH	-35.99	-36.30	-36.11	-36.39	-36.23	-36.42	-36.36	-36.67	-36.60	-37.06	-36.98	-37.24
YEAR	-35.64	-37.24										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Dc 35. SITE ID.--383050076305501. PERMIT NUMBER.--CA-73-0718.

LOCATION.--Lat 38°30'50", long 76°30'55", Hydrologic Unit 02060004, 5.1 mi. southeast of Prince Frederick, at Scientist Cliff community. Owner: U.S. Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 760 ft; casing diameter 4 in., to 750 ft; screen diameter 2 in., from 750 to 760 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel from November 1991 to current year. Twice yearly water level measurements from April 1975 to September 1978, and April 1983 to September 1990. Equipped with water-level recorder from February 1976 to January 1980.

DATUM.--Elevation of land surface is 91.60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.90 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1974 to current year.

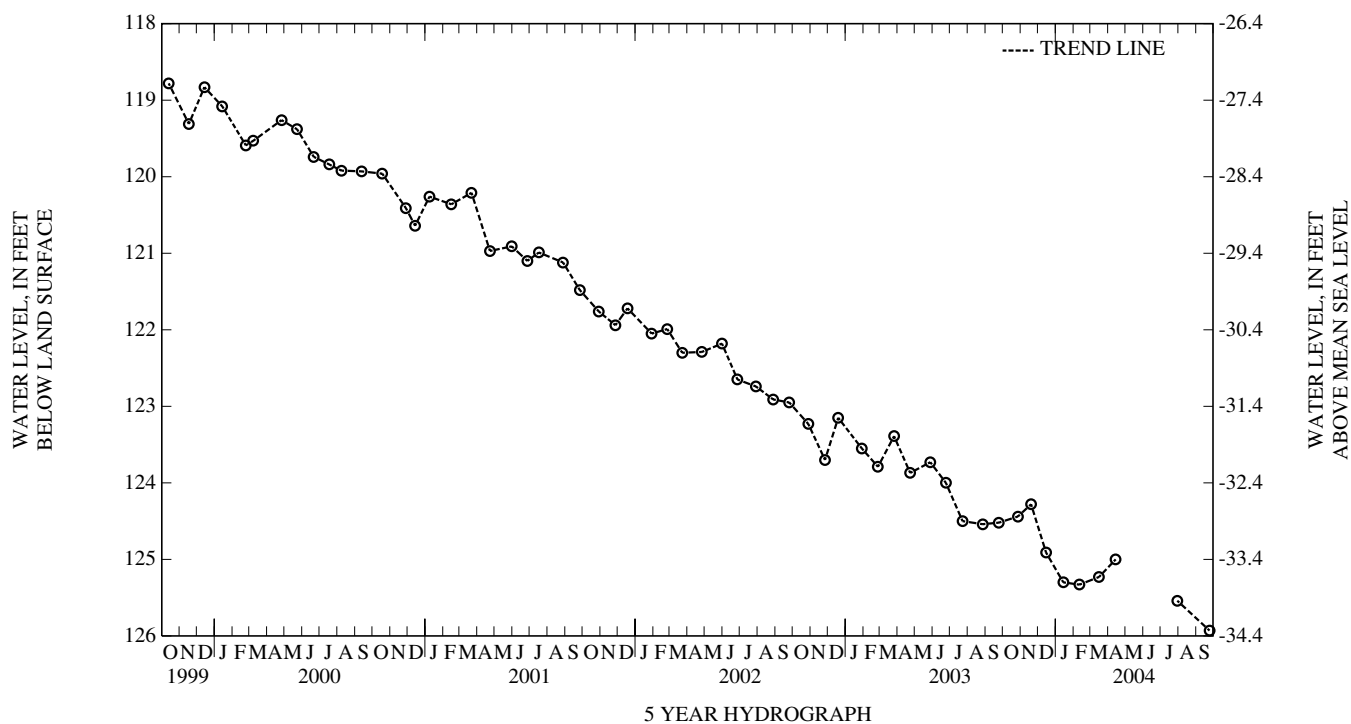
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.30 ft below land surface, September 12, 1975; lowest measured, 125.93 ft below land surface, September 24, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	124.44	JAN 14, 2004	125.30	APR 14, 2004	125.00
NOV 19	124.28	FEB 11	125.33	JUL 30	125.54
DEC 15	124.91	MAR 16	125.23	SEP 24	125.93

HIGHEST 124.28 NOV 19, 2003

LOWEST 125.93 SEP 24, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Ed 52. SITE ID.--382549076260101. PERMIT NUMBER.--CA-92-0081.

LOCATION.--Lat 38°25'49", long 76°26'01", Hydrologic Unit 020600004, at Calvert Cliffs Nuclear Power Plant, 4.3 mi. southeast of St. Leonard. Owner: Constellation Energy Group.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 590 ft; casing diameter 4.5 in., to 460 ft; casing diameter 2 in., from 455 to 565 ft, and 580 to 590 ft; screen diameter 2 in., from 565 to 580 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from April 1995 to current year.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 1.40 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--April 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 70.66 ft below sea level, May 21, 1995 (recorder); lowest measured, 114.00 ft below sea level, February 5 and 14, 2004 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	-105.94	FEB 04, 2004	-112.33	JUN 17, 2004	-110.47
DEC 10	-110.43	MAR 31	-107.09	AUG 25	-106.08

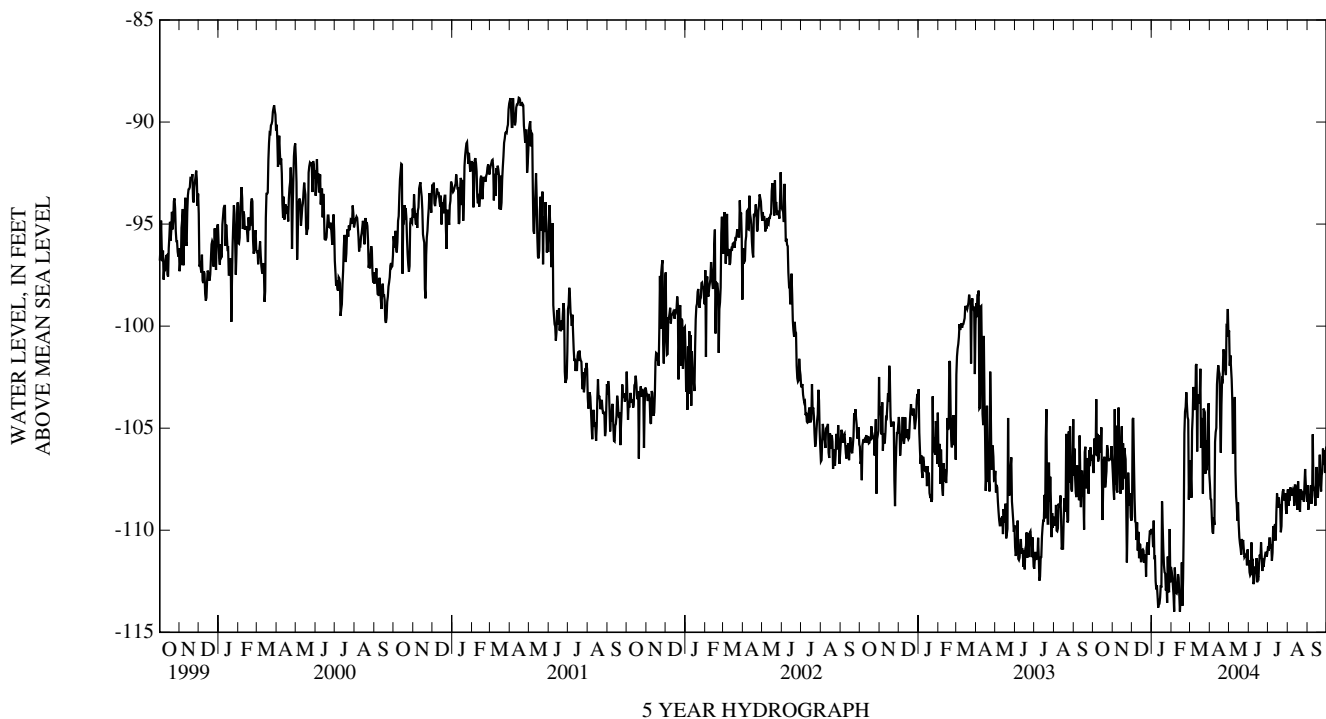
LOWEST -112.33 FEB 04, 2004
 HIGHEST -105.94 OCT 02, 2003

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-103.3	-106.9	-103.8	-107.2	-104.4	-109.4	-106.2	-110.0	-108.0	-112.0	-104.6	-106.6
2	-103.7	-107.2	-104.6	-108.0	-101.4	-104.6	-105.9	-110.2	-108.5	-112.2	-104.2	-107.3
3	-102.8	-105.5	-104.1	-108.5	-100.5	-104.5	-107.0	-110.8	-108.8	-112.7	-104.5	-108.4
4	-102.4	-105.9	-102.9	-104.1	-102.6	-106.6	-105.7	-109.5	-109.8	-113.2	-103.4	-105.1
5	-102.5	-106.3	-102.8	-107.8	-106.6	-108.4	-109.5	-111.3	-107.3	-114.0	-101.5	-104.4
6	-102.2	-103.6	-103.0	-104.9	-108.4	-109.6	-107.9	-111.3	-106.9	-111.8	-101.4	-103.0
7	-102.1	-106.4	-103.3	-108.0	-106.2	-109.7	-110.5	-112.5	-107.3	-112.5	-102.8	-103.2
8	-102.2	-105.3	-103.2	-108.2	-109.1	-110.5	-108.5	-112.9	-109.0	-113.1	-102.8	-104.0
9	-103.1	-106.6	-103.6	-107.1	-106.4	-109.6	-109.4	-112.7	-109.6	-113.1	-101.9	-104.1
10	-103.0	-106.5	-102.5	-104.0	-105.5	-111.0	-108.8	-113.2	-107.6	-113.0	-99.2	-101.9
11	-101.9	-105.4	-101.9	-106.1	-105.1	-110.1	-108.2	-113.8	-107.5	-112.2	-100.9	-101.9
12	-102.1	-105.6	-102.1	-106.5	-107.5	-111.4	-110.5	-113.6	-109.2	-112.3	-101.3	-106.1
13	-102.0	-106.2	-101.9	-108.2	-107.4	-110.7	-109.8	-113.6	-109.4	-113.2	-102.8	-103.6
14	-101.7	-105.0	-104.9	-106.0	-110.0	-110.7	-109.7	-113.3	-109.7	-114.0	-102.5	-103.3
15	-101.3	-107.7	-104.2	-104.9	-108.1	-111.5	-108.6	-112.7	-109.5	-113.3	-102.5	-103.8
16	-105.6	-109.5	-104.2	-108.0	-107.2	-111.5	-107.4	-112.8	-109.7	-113.4	-101.1	-103.5
17	-104.0	-107.5	-103.3	-105.7	-108.2	-111.0	-105.5	-108.6	-108.5	-111.6	-101.0	-102.1
18	-103.0	-106.5	-103.0	-107.5	-107.3	-110.9	-105.2	-109.8	-109.5	-113.7	-101.6	-106.0
19	-102.6	-106.4	-102.2	-106.0	-106.5	-111.0	-106.9	-110.9	-107.9	-112.3	-103.4	-105.2
20	-102.6	-107.9	-102.8	-106.3	-106.9	-111.6	-107.3	-111.7	-105.2	-109.7	-102.4	-104.5
21	-102.9	-107.5	-102.8	-106.5	-111.0	-111.5	-108.6	-112.1	-103.8	-105.2	-103.8	-108.2
22	-103.5	-107.1	-106.0	-108.8	-107.9	-111.2	-107.7	-112.1	-103.2	-104.2	-102.9	-104.0
23	-102.6	-105.8	-105.4	-111.6	-107.3	-112.3	-108.7	-113.0	-103.0	-104.0	-103.0	-104.1
24	-102.4	-106.0	-104.9	-109.7	-107.2	-110.9	-108.7	-112.5	-100.6	-103.2	-102.9	-104.2
25	-103.2	-106.5	-103.4	-107.2	-107.0	-110.6	-109.0	-113.6	-101.9	-103.9	-103.1	-107.2
26	-102.9	-106.6	-103.9	-108.1	-107.0	-110.7	-107.7	-111.3	-103.3	-104.5	-103.9	-105.6
27	-102.3	-106.5	-103.9	-108.8	-107.0	-111.2	-110.2	-112.7	-103.5	-104.6	-103.3	-107.1
28	-102.5	-106.5	-102.9	-108.2	-106.3	-110.5	-107.3	-113.0	-103.5	-108.5	-103.4	-106.2
29	-102.5	-106.5	-103.0	-109.4	-106.2	-110.0	-106.4	-109.9	-105.6	-107.0	-103.0	-104.1
30	-103.2	-105.9	-106.0	-109.5	-105.9	-110.2	-106.4	-112.5	---	---	-102.8	-103.8
31	-102.5	-106.6	---	---	-106.3	-109.9	-108.2	-111.8	---	---	-102.8	-107.2
MONTH	-101.3	-109.5	-101.9	-111.6	-100.5	-112.3	-105.2	-113.8	-100.6	-114.0	-99.2	-108.4

CALVERT COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-103.3	-107.8	-97.8	-100.2	-110.0	-111.5	-109.6	-110.8	-106.6	-108.0	-106.1	-107.8
2	-104.5	-108.5	-98.5	-101.9	-110.5	-112.1	-109.2	-111.0	-106.9	-108.8	-107.0	-109.0
3	-104.8	-108.5	-100.3	-101.4	-110.5	-112.2	-109.2	-110.4	-107.0	-108.5	-107.4	-108.7
4	-104.9	-109.4	-100.4	-102.0	-110.4	-112.2	-109.2	-110.4	-106.3	-108.5	-106.8	-108.6
5	-106.5	-110.1	-101.1	-102.6	-109.3	-110.6	-109.4	-110.9	-106.6	-107.9	-106.3	-108.2
6	-106.1	-110.2	-101.6	-103.6	-110.2	-111.5	-109.2	-110.7	-106.3	-108.2	-106.3	-107.8
7	-106.1	-109.4	-102.3	-106.3	-110.4	-111.4	-110.0	-111.5	-106.5	-108.3	-106.6	-108.7
8	-105.6	-109.7	-103.8	-106.0	-111.0	-112.6	-104.7	-111.1	-106.7	-108.1	-103.1	-108.3
9	-104.5	-105.7	-102.7	-104.2	-110.8	-112.5	-105.8	-109.8	-106.7	-108.0	-103.1	-105.3
10	-104.2	-105.2	-102.1	-103.5	-110.5	-112.2	-108.6	-110.5	-106.5	-108.1	-104.7	-107.8
11	-102.9	-105.0	-102.5	-107.1	-110.5	-111.8	-108.2	-109.8	-106.8	-108.8	-106.1	-108.0
12	-101.2	-102.9	-106.2	-108.3	-110.5	-112.1	-108.0	-109.7	-106.7	-107.8	-106.6	-108.1
13	-100.5	-102.3	-107.0	-108.8	-110.3	-111.4	-108.7	-110.5	-106.1	-107.8	-106.8	-108.8
14	-99.5	-101.9	-107.6	-109.5	-110.8	-112.5	-106.5	-109.1	-106.0	-107.9	-106.5	-107.9
15	-100.2	-102.2	-107.3	-108.6	-110.6	-112.3	-106.6	-108.2	-106.8	-108.6	-105.8	-106.9
16	-99.5	-102.3	-107.8	-109.7	-110.3	-112.3	-107.4	-108.6	-106.9	-109.0	-106.0	-107.9
17	-102.3	-104.7	-108.6	-110.3	-110.1	-111.6	-107.3	-108.9	-106.4	-107.6	-106.5	-108.4
18	-103.5	-106.2	-108.8	-110.7	-109.6	-111.2	-107.0	-108.4	-107.2	-108.5	-106.6	-107.7
19	-101.3	-103.8	-109.5	-110.9	-109.7	-111.4	-107.4	-108.8	-107.5	-108.7	-105.1	-107.2
20	-100.3	-102.6	-109.6	-111.2	-109.5	-110.6	-106.9	-108.8	-107.2	-109.1	-105.0	-106.3
21	-99.9	-102.7	-109.2	-110.4	-109.5	-111.3	-107.9	-110.1	-106.6	-108.0	-105.2	-107.6
22	-98.8	-101.1	-109.3	-110.7	-110.5	-112.0	-108.1	-109.8	-106.9	-108.5	-105.8	-108.1
23	-98.7	-101.2	-108.8	-110.5	-109.6	-111.4	-107.1	-108.4	-106.6	-108.3	-105.8	-107.3
24	-100.8	-102.1	-109.0	-110.9	-109.7	-111.8	-106.6	-108.1	-105.8	-108.2	-105.9	-107.1
25	-101.2	-102.1	-109.6	-111.3	-109.7	-111.5	-106.8	-108.0	-105.8	-108.3	-105.2	-106.0
26	-100	-102.4	-109.7	-111.3	-109.5	-111.3	-106.8	-108.5	-106.8	-108.6	-105.6	-106.8
27	-98.7	-100	-109.3	-111.2	-109.6	-111.1	-107.2	-108.5	-106.3	-107.8	-105.4	-106.7
28	-97.5	-100.0	-109.6	-111.2	-109.9	-111.1	-106.7	-108.2	-105.9	-107.0	-104.9	-106.1
29	-97.1	-99.2	-110.0	-111.7	-110.1	-111.3	-106.7	-109.0	-106.0	-107.7	-105.4	-107.2
30	-99.2	-100.5	-109.7	-110.9	-109.8	-111.1	-107.1	-109.2	-105.9	-108.2	-104.8	-105.9
31	---	---	-110.0	-111.7	---	---	-106.8	-108.4	-106.4	-108.6	---	---
MONTH	-97.1	-110.2	-97.8	-111.7	-109.3	-112.6	-104.7	-111.5	-105.8	-109.1	-103.1	-109.0
YEAR	-97.1	-114.0										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Fc 13. SITE ID.--382343076302901. PERMIT NUMBER.--CA-81-2391.

LOCATION.--Lat 38°23'41", long 76°30'29", Hydrologic Unit 02060006, Jefferson Patterson State Park and Museum. Owner: U.S. Geological Survey.

AQUIFER.--Choptank-St. Mary's undivided, Chesapeake Group of Miocene age. Aquifer code: 122CSPK.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 34 ft; casing diameter 3.5 in., to 29 ft; screen diameter 3.5 in., from 29 to 34 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1986 to April 1996.

DATUM.--Elevation of land surface is 47.44 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well, and Maryland Water Quality Network observation well. Water levels respond to natural climatic affects.

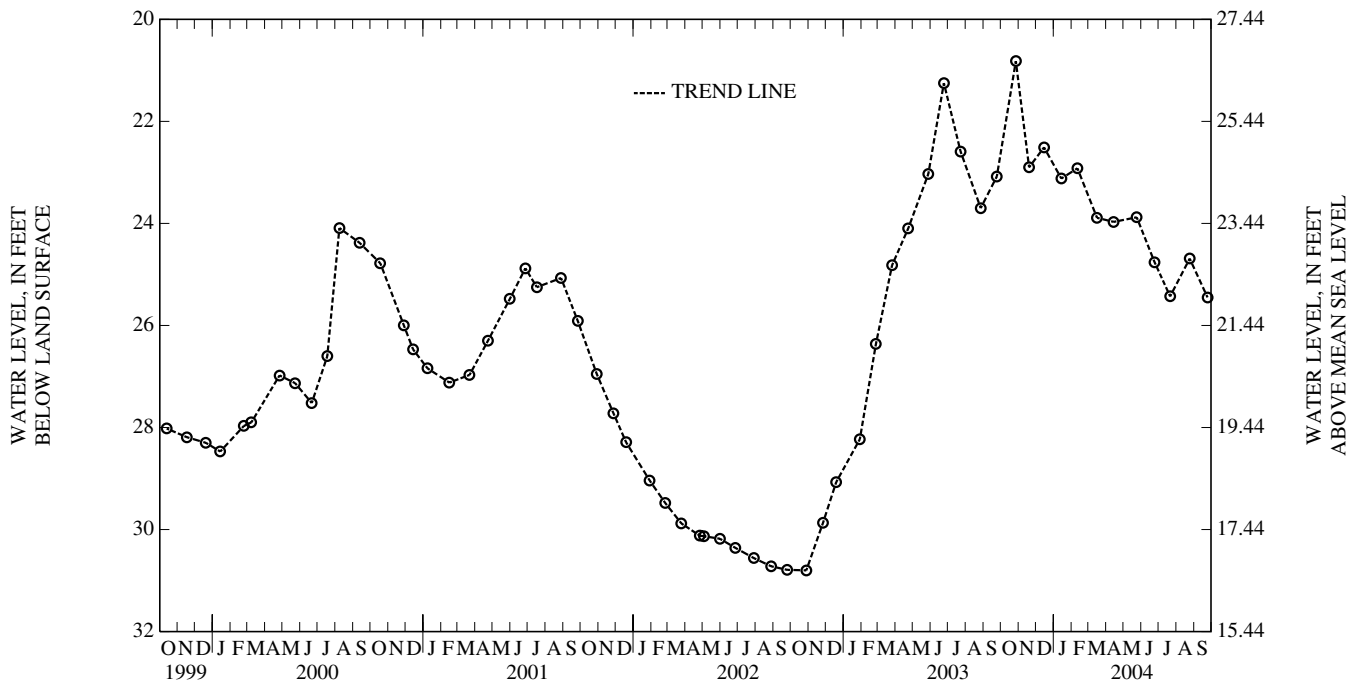
PERIOD OF RECORD.--October 1986 to November 1995, September 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.82 ft below land surface, October 27, 2003; lowest measured, 30.80 ft below land surface, October 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2003	20.82	JAN 14, 2004	23.12	APR 14, 2004	23.97	JUL 21, 2004	25.43
NOV 19	22.90	FEB 11	22.92	MAY 24	23.88	AUG 24	24.69
DEC 15	22.51	MAR 16	23.89	JUN 24	24.76	SEP 24	25.45

HIGHEST 20.82 OCT 27, 2003
 LOWEST 30.80 OCT 28, 2002



CALVERT COUNTY--Continued

WELL NUMBER.--CA Fd 51. SITE ID.--382408076260401. PERMIT NUMBER.--CA-73-1449.

LOCATION.--Lat 38°24'08", long 76°26'04", Hydrologic Unit 02060004, at Calvert Cliffs State Park. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 352 ft; casing diameter 6 in., to 140 ft; casing diameter 2 in., from 140 to 342 ft; screen diameter 2 in., from 342 to 352 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 129.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of protective casing, 3.63 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

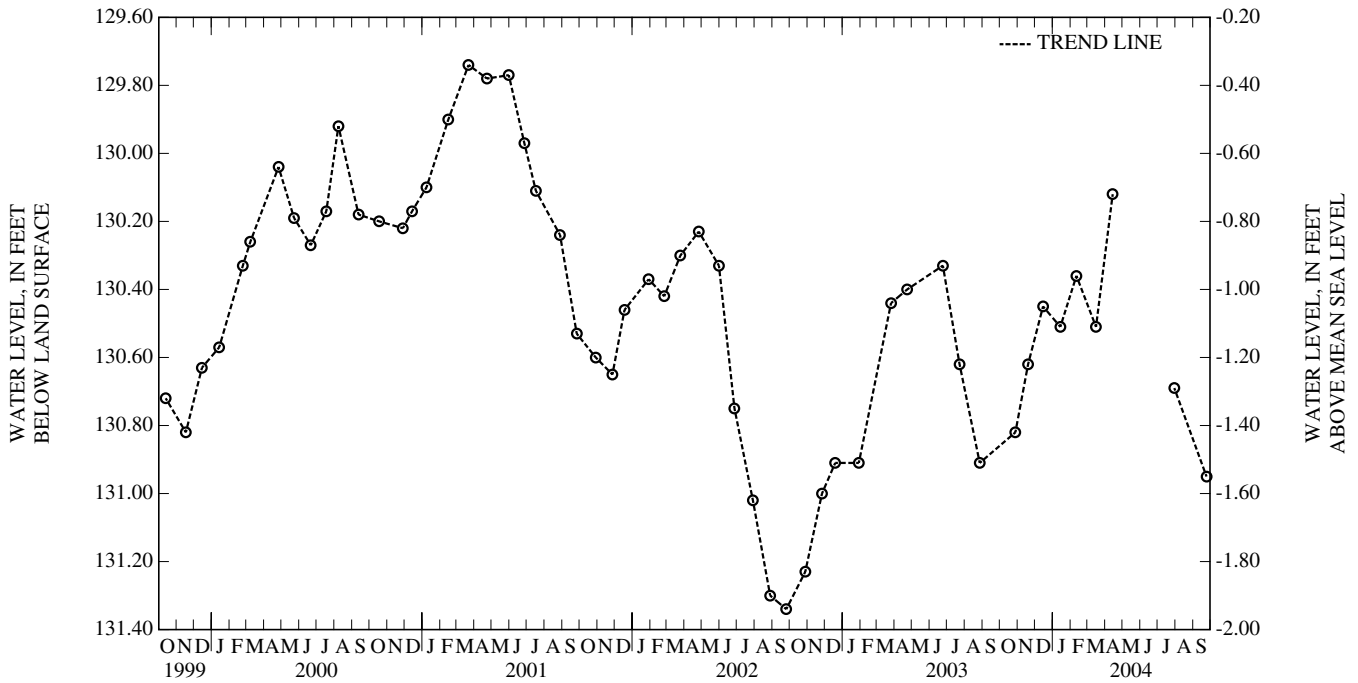
PERIOD OF RECORD.--February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 116.36 ft below land surface, January 8, 1980; lowest measured, 131.34 ft below land surface, September 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	130.82	JAN 14, 2004	130.51	APR 14, 2004	130.12
NOV 19	130.62	FEB 11	130.36	JUL 30	130.69
DEC 15	130.45	MAR 16	130.51	SEP 24	130.95

HIGHEST 130.12 APR 14, 2004
 LOWEST 130.95 SEP 24, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Fd 54. SITE ID.--382407076260301. PERMIT NUMBER.--CA-73-2892.

LOCATION.--Lat 38°24'07", long 76°26'03", Hydrologic Unit 02060004, at Calvert Cliffs State Park. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 698 ft; casing diameter 4 in., to 234 ft; casing diameter 2 in., from 234 to 641 ft, and 651 to 698 ft; screen diameter 3 in., from 641 to 651 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder from March 2004 to current year

DATUM.--Elevation of land surface is 129.4 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.92 ft above land surface.

REMARKS.--Calvert County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.26 ft below sea level, April 21, 1980; lowest measured, 109.16 ft below sea level, August 28 and September 25, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

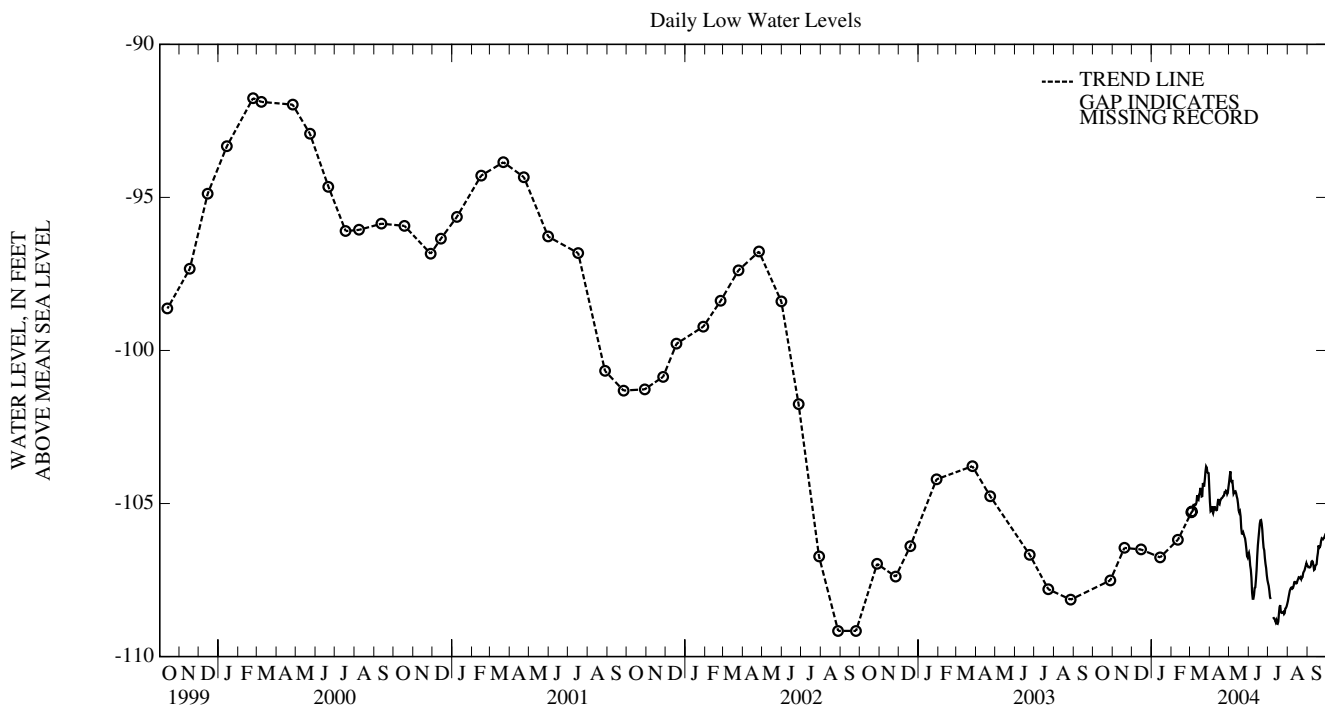
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	-107.51	FEB 11, 2004	-106.18	MAY 05, 2004	-104.28	JUN 29, 2004	-107.29
NOV 19	-106.45	MAR 03	-105.29	24	-105.98	JUL 08	-108.41
DEC 15	-106.50	16	-104.49	JUN 01	-106.56	16	-108.92
JAN 14, 2004	-106.76	APR 14	-104.76	24	-106.30	SEP 24	-106.15

LOWEST -108.92 JUL 16, 2004
 HIGHEST -104.28 MAY 05, 2004

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	-105.18	-105.26
6	---	---	---	---	---	---	---	---	---	---	-105.03	-105.24
7	---	---	---	---	---	---	---	---	---	---	-104.89	-105.08
8	---	---	---	---	---	---	---	---	---	---	-104.88	-105.10
9	---	---	---	---	---	---	---	---	---	---	-104.87	-105.03
10	---	---	---	---	---	---	---	---	---	---	-104.97	-105.03
11	---	---	---	---	---	---	---	---	---	---	-104.96	-105.03
12	---	---	---	---	---	---	---	---	---	---	-104.67	-104.96
13	---	---	---	---	---	---	---	---	---	---	-104.60	-104.73
14	---	---	---	---	---	---	---	---	---	---	-104.73	-104.88
15	---	---	---	---	---	---	---	---	---	---	-104.70	-104.89
16	---	---	---	---	---	---	---	---	---	---	-104.66	-104.71
17	---	---	---	---	---	---	---	---	---	---	-104.39	-104.66
18	---	---	---	---	---	---	---	---	---	---	-104.43	-104.49
19	---	---	---	---	---	---	---	---	---	---	-104.48	-104.58
20	---	---	---	---	---	---	---	---	---	---	-104.45	-104.77
21	---	---	---	---	---	---	---	---	---	---	-104.29	-104.76
22	---	---	---	---	---	---	---	---	---	---	-104.21	-104.33
23	---	---	---	---	---	---	---	---	---	---	-104.21	-104.33
24	---	---	---	---	---	---	---	---	---	---	-104.32	-104.42
25	---	---	---	---	---	---	---	---	---	---	-104.21	-104.42
26	---	---	---	---	---	---	---	---	---	---	-103.95	-104.21
27	---	---	---	---	---	---	---	---	---	---	-103.78	-103.95
28	---	---	---	---	---	---	---	---	---	---	-103.75	-103.79
29	---	---	---	---	---	---	---	---	---	---	-103.73	-103.83
30	---	---	---	---	---	---	---	---	---	---	-103.83	-103.98
31	---	---	---	---	---	---	---	---	---	---	-103.97	-104.00
MONTH	---	---	---	---	---	---	---	---	---	---	-103.94	-104.01
											-104.00	-104.50
											-103.73	-105.26

CALVERT COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-104.49	-104.95	-104.11	-104.30	-106.49	-106.61	-107.48	-107.60	-108.07	-108.19	-106.96	-107.03
2	-104.95	-105.24	-103.91	-104.11	-106.58	-106.75	-107.57	-107.69	-107.96	-108.07	-106.99	-107.08
3	-105.06	-105.21	-103.87	-103.95	-106.74	-107.02	-107.65	-107.85	-107.82	-107.96	-107.02	-107.08
4	-104.95	-105.09	-103.92	-104.27	-107.00	-107.16	-107.85	-108.05	-107.77	-107.85	-107.03	-107.09
5	-105.07	-105.26	-104.09	-104.29	-107.07	-107.43	-107.99	-108.12	-107.70	-107.79	-107.03	-107.08
6	-105.22	-105.32	-104.11	-104.23	-107.43	-107.91	---	---	-107.71	-107.75	-106.89	-107.03
7	-105.04	-105.22	-104.15	-104.46	-107.91	-108.11	---	---	-107.71	-107.74	-106.87	-106.90
8	-104.99	-105.09	-104.46	-104.68	-107.99	-108.11	---	---	-107.73	-107.78	-106.80	-106.88
9	-105.01	-105.15	-104.58	-104.64	-107.70	-107.99	-108.57	-108.71	-107.69	-107.76	-106.78	-106.90
10	-105.14	-105.20	-104.55	-104.61	-107.69	-107.76	-108.70	-108.75	-107.56	-107.69	-106.90	-107.02
11	-105.13	-105.22	-104.55	-104.60	-107.49	-107.74	-108.71	-108.76	-107.53	-107.57	-107.02	-107.17
12	-105.00	-105.21	-104.60	-104.66	-107.18	-107.49	-108.72	-108.82	-107.48	-107.56	-107.03	-107.15
13	-104.74	-105.00	-104.66	-104.77	-106.72	-107.18	-108.79	-108.88	-107.47	-107.57	-106.97	-107.03
14	-104.74	-104.85	-104.77	-104.85	-106.37	-106.72	-108.69	-108.82	-107.51	-107.61	-106.94	-107.01
15	-104.85	-105.01	-104.85	-105.01	-106.13	-106.37	-108.72	-108.92	-107.51	-107.60	-106.74	-106.98
16	-104.92	-105.03	-105.01	-105.23	-105.90	-106.13	-108.86	-108.93	-107.42	-107.52	-106.58	-106.75
17	-104.77	-104.92	-105.20	-105.30	-105.66	-105.90	-108.60	-108.86	-107.39	-107.47	-106.20	-106.61
18	-104.78	-104.87	-105.19	-105.26	-105.55	-105.66	-108.38	-108.60	-107.34	-107.41	-106.12	-106.37
19	-104.73	-104.83	-105.20	-105.42	-105.45	-105.55	-108.30	-108.38	-107.35	-107.42	-106.37	-106.45
20	-104.73	-104.82	-105.42	-105.80	-105.45	-105.54	-108.25	-108.32	-107.36	-107.44	-106.36	-106.43
21	-104.62	-104.79	-105.76	-105.98	-105.52	-105.66	-108.31	-108.54	-107.31	-107.41	-106.21	-106.37
22	-104.59	-104.75	-105.91	-105.98	-105.66	-105.87	-108.51	-108.57	-107.38	-107.47	-106.13	-106.22
23	-104.62	-104.74	-105.87	-105.94	-105.87	-106.19	-108.50	-108.56	-107.35	-107.41	-106.11	-106.14
24	-104.53	-104.63	-105.91	-106.01	-106.19	-106.44	-108.53	-108.56	-107.25	-107.40	-106.11	-106.16
25	-104.53	-104.63	-106.00	-106.08	-106.44	-106.53	-108.47	-108.54	-107.19	-107.27	-106.09	-106.17
26	-104.46	-104.58	-106.03	-106.14	-106.53	-106.78	-108.49	-108.61	-107.13	-107.22	-106.07	-106.13
27	-104.51	-104.60	-106.14	-106.29	-106.78	-106.97	-108.38	-108.58	-107.09	-107.19	-106.05	-106.11
28	-104.60	-104.69	-106.25	-106.48	-106.97	-107.11	-108.36	-108.43	-107.03	-107.11	-105.76	-106.05
29	-104.46	-104.64	-106.48	-106.71	-107.11	-107.34	-108.32	-108.41	-106.94	-107.03	-105.86	-106.09
30	-104.30	-104.46	-106.66	-106.76	-107.34	-107.50	-108.27	-108.36	-106.79	-106.95	-106.05	-106.16
31	---	---	-106.50	-106.66	---	---	-108.17	-108.28	-106.79	-107.02	---	---
MONTH	-104.30	-105.32	-103.87	-106.76	-105.45	-108.11	-107.48	-108.93	-106.79	-108.19	-105.76	-107.17
YEAR	-103.73	-108.93										



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Fd 85. SITE ID.--382236076255401. PERMIT NUMBER.--CA-94-3305.

LOCATION.--Lat 38°22'36", long 76°25'54", Hydrologic Unit 02060004, at Chesapeake Ranch Water Company facility. Owner: Maryland Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 1,643 ft; casing diameter 12 in., to 54 ft, casing diameter 4 in., from +2.0 to 1,535 ft, 1,545 to 1,560 ft, 1,570 to 1,623 ft, and 1,633 to 1,643 ft; screen diameter 4 in., from 1,535 to 1,545 ft, 1,560 to 1,570 ft, and 1,623 to 1,633 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S.Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, January 2002 to current year.

DATUM.--Elevation of land surface is 105.98 ft above North American Vertical Datum of 1988. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--November 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.34 ft below sea level, February 1, 2002 (recorder); lowest measured, 17.75 ft below sea level, September 14, 2004 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

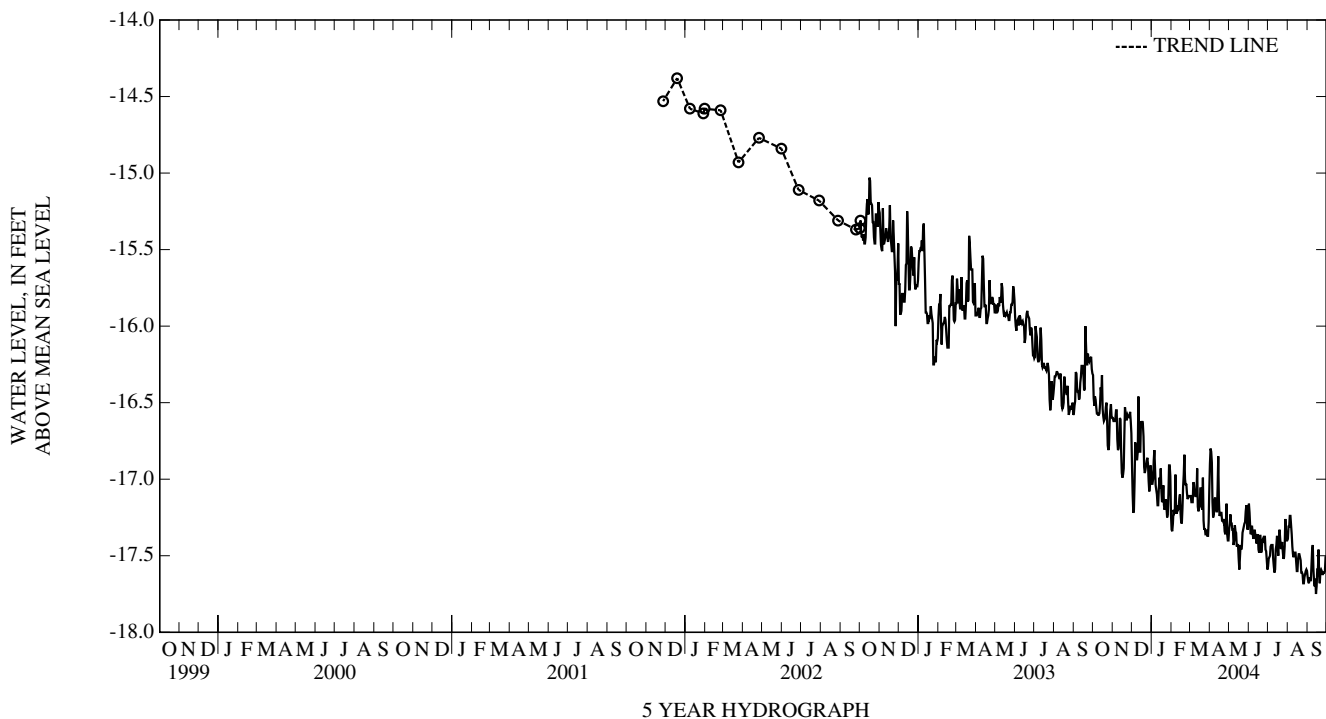
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	-16.53	JAN 14, 2004	-17.00	APR 14, 2004	-16.78	JUL 21, 2004	-17.43
NOV 20	-16.47	FEB 11	-17.17	JUN 01	-17.16	SEP 24	-17.62
DEC 15	-16.60	MAR 16	-17.01	24	-17.41		
LOWEST -17.62 SEP 24, 2004							
HIGHEST -16.47 NOV 20, 2003							

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-16.31	-16.32	-16.60	-16.60	-16.70	-16.91	-16.94	-17.03	-17.23	-17.33	-17.11	-17.11
2	-16.32	-16.47	-16.60	-16.62	-16.91	-17.10	-17.00	-17.03	-17.29	-17.34	-17.02	-17.11
3	-16.46	-16.52	-16.61	-16.62	-17.10	-17.22	-16.88	-17.00	-17.01	-17.29	-17.08	-17.15
4	-16.30	-16.46	-16.60	-16.62	-17.02	-17.20	-16.81	-16.88	-17.02	-17.20	-17.15	-17.15
5	-16.31	-16.48	-16.55	-16.60	-16.76	-17.02	-16.75	-16.81	-17.20	-17.22	-17.02	-17.15
6	-16.48	-16.53	-16.34	-16.55	-16.69	-16.76	-16.80	-16.92	-16.83	-17.21	-16.89	-17.02
7	-16.53	-16.57	-16.41	-16.55	-16.74	-16.83	-16.92	-17.04	-16.81	-16.97	-16.94	-17.03
8	-16.56	-16.57	-16.55	-16.74	-16.83	-16.87	-17.04	-17.07	-16.97	-17.22	-16.95	-17.08
9	-16.56	-16.58	-16.74	-16.81	-16.82	-16.87	-17.07	-17.10	-17.17	-17.22	-17.08	-17.11
10	-16.56	-16.58	-16.73	-16.80	-16.46	-16.82	-17.10	-17.17	-17.08	-17.17	-17.11	-17.11
11	-16.51	-16.57	-16.60	-16.74	-16.25	-16.46	-17.06	-17.17	-17.08	-17.20	-16.93	-17.11
12	-16.29	-16.51	-16.41	-16.60	-16.46	-16.68	-16.93	-17.06	-17.13	-17.19	-16.86	-16.93
13	-16.30	-16.40	-16.30	-16.61	-16.68	-16.82	-16.93	-16.99	-17.10	-17.13	-16.92	-17.18
14	-16.17	-16.44	-16.61	-16.82	-16.46	-16.82	-16.83	-17.06	-17.05	-17.10	-17.18	-17.21
15	-16.13	-16.32	-16.82	-16.96	-16.46	-16.62	-16.83	-16.93	-17.06	-17.22	-17.18	-17.19
16	-16.32	-16.54	-16.96	-16.99	-16.62	-16.66	-16.93	-17.08	-17.20	-17.28	-16.98	-17.18
17	-16.54	-16.59	-16.93	-16.97	-16.53	-16.62	-17.08	-17.15	-17.19	-17.29	-17.03	-17.06
18	-16.59	-16.62	-16.71	-16.93	-16.59	-16.64	-16.82	-17.14	-17.05	-17.19	-16.98	-17.06
19	-16.56	-16.61	-16.30	-16.71	-16.64	-16.72	-16.91	-17.04	-16.96	-17.05	-16.93	-17.15
20	-16.53	-16.60	-16.30	-16.53	-16.72	-16.92	-17.04	-17.17	-16.77	-16.97	-16.91	-17.20
21	-16.28	-16.53	-16.53	-16.57	-16.92	-16.96	-17.17	-17.20	-16.70	-16.84	-16.84	-16.99
22	-16.29	-16.50	-16.57	-16.61	-16.86	-16.94	-16.98	-17.18	-16.84	-17.00	-16.99	-17.27
23	-16.50	-16.61	-16.58	-16.61	-16.87	-16.91	-17.08	-17.13	-17.00	-17.04	-17.27	-17.33
24	-16.61	-16.78	-16.38	-16.58	-16.73	-16.88	-17.06	-17.19	-16.93	-17.03	-17.32	-17.32
25	-16.77	-16.81	-16.52	-16.59	-16.80	-16.86	-17.19	-17.25	-16.95	-17.09	-17.32	-17.36
26	-16.62	-16.78	-16.56	-16.59	-16.86	-16.90	-17.10	-17.23	-17.09	-17.13	-17.33	-17.36
27	-16.46	-16.62	-16.56	-16.60	-16.90	-17.01	-16.83	-17.10	-17.10	-17.12	-17.31	-17.33
28	-16.48	-16.55	-16.24	-16.56	-17.01	-17.08	-16.83	-16.91	-17.10	-17.11	-17.31	-17.37
29	-16.29	-16.51	-16.27	-16.62	-16.83	-17.04	-16.91	-16.91	-17.11	-17.11	-17.28	-17.37
30	-16.51	-16.59	-16.62	-16.70	-16.76	-16.91	-16.91	-16.98	---	---	-17.07	-17.28
31	-16.59	-16.60	---	---	-16.91	-16.96	-16.98	-17.23	---	---	-16.90	-17.07
MONTH	-16.13	-16.81	-16.24	-16.99	-16.25	-17.22	-16.75	-17.25	-16.70	-17.34	-16.84	-17.37

CALVERT COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-16.78	-16.90	-17.29	-17.33	-17.10	-17.16	-17.52	-17.57	-17.31	-17.39	-17.60	-17.64
2	-16.78	-16.80	-17.17	-17.29	-17.16	-17.22	-17.49	-17.52	-17.30	-17.31	-17.64	-17.67
3	-16.80	-16.82	-17.18	-17.23	-17.21	-17.31	-17.48	-17.51	-17.24	-17.31	-17.63	-17.68
4	-16.72	-16.89	-17.23	-17.29	-17.31	-17.36	-17.44	-17.50	-17.24	-17.24	-17.63	-17.64
5	-16.89	-17.15	-17.25	-17.29	-17.24	-17.31	-17.39	-17.44	-17.24	-17.24	-17.63	-17.66
6	-17.15	-17.25	-17.25	-17.33	-17.24	-17.31	-17.40	-17.43	-17.24	-17.30	-17.56	-17.66
7	-17.14	-17.23	-17.30	-17.33	-17.31	-17.36	-17.42	-17.43	-17.30	-17.36	-17.46	-17.56
8	-17.08	-17.14	-17.31	-17.43	-17.34	-17.39	-17.42	-17.43	-17.36	-17.44	-17.39	-17.46
9	-17.08	-17.12	-17.30	-17.40	-17.32	-17.36	-17.43	-17.52	-17.44	-17.49	-17.36	-17.43
10	-17.12	-17.15	-17.29	-17.30	-17.32	-17.33	-17.52	-17.57	-17.48	-17.51	-17.43	-17.59
11	-17.15	-17.21	-17.29	-17.34	-17.33	-17.36	-17.57	-17.61	-17.48	-17.48	-17.59	-17.67
12	-17.06	-17.21	-17.34	-17.35	-17.36	-17.39	-17.46	-17.59	-17.48	-17.48	-17.64	-17.70
13	-16.78	-17.06	-17.35	-17.44	-17.37	-17.42	-17.43	-17.46	-17.48	-17.48	-17.64	-17.65
14	-16.78	-16.85	-17.42	-17.43	-17.32	-17.37	-17.31	-17.43	-17.48	-17.54	-17.64	-17.75
15	-16.85	-17.14	-17.38	-17.43	-17.32	-17.36	-17.32	-17.37	-17.50	-17.60	-17.59	-17.70
16	-17.14	-17.24	-17.43	-17.52	-17.34	-17.46	-17.37	-17.44	-17.51	-17.60	-17.56	-17.59
17	-17.17	-17.23	-17.51	-17.59	-17.37	-17.48	-17.39	-17.50	-17.49	-17.52	-17.29	-17.59
18	-17.18	-17.22	-17.43	-17.51	-17.35	-17.37	-17.28	-17.39	-17.45	-17.49	-17.26	-17.46
19	-17.17	-17.22	-17.37	-17.43	-17.33	-17.37	-17.31	-17.33	-17.45	-17.49	-17.46	-17.63
20	-17.18	-17.27	-17.41	-17.46	-17.37	-17.48	-17.33	-17.39	-17.49	-17.51	-17.60	-17.68
21	-17.23	-17.27	-17.35	-17.44	-17.40	-17.47	-17.39	-17.45	-17.48	-17.53	-17.58	-17.60
22	-17.23	-17.28	-17.32	-17.35	-17.31	-17.40	-17.40	-17.45	-17.53	-17.61	-17.58	-17.59
23	-17.23	-17.26	-17.30	-17.33	-17.31	-17.39	-17.40	-17.41	-17.60	-17.61	-17.58	-17.60
24	-17.26	-17.34	-17.28	-17.31	-17.39	-17.41	-17.41	-17.47	-17.60	-17.62	-17.60	-17.62
25	-17.29	-17.36	-17.28	-17.29	-17.33	-17.41	-17.47	-17.52	-17.62	-17.68	-17.58	-17.62
26	-17.12	-17.29	-17.21	-17.28	-17.31	-17.37	-17.44	-17.51	-17.64	-17.68	-17.57	-17.61
27	-17.12	-17.16	-17.17	-17.21	-17.37	-17.46	-17.22	-17.44	-17.61	-17.64	-17.60	-17.61
28	-17.16	-17.36	-17.11	-17.17	-17.46	-17.47	-17.22	-17.26	-17.58	-17.62	-17.27	-17.60
29	-17.36	-17.40	-17.12	-17.29	-17.46	-17.53	-17.24	-17.33	-17.58	-17.60	-17.30	-17.51
30	-17.33	-17.40	-17.27	-17.33	-17.53	-17.59	-17.33	-17.40	-17.45	-17.59	-17.49	-17.51
31	---	---	-17.09	-17.27	---	---	-17.37	-17.40	-17.43	-17.60	---	---
MONTH	-16.72	-17.40	-17.09	-17.59	-17.10	-17.59	-17.22	-17.61	-17.24	-17.68	-17.26	-17.75
YEAR	-16.13	-17.75										

Daily Low Water Levels



CALVERT COUNTY--Continued

WELL NUMBER.--CA Fe 22. SITE ID.--382318076242401. PERMIT NUMBER.--CA-73-1386.

LOCATION.--Lat 38°23'18", long 76°24'24", Hydrologic Unit 02060004, at Williams LNG Plant, Cove Point. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 350 ft; casing diameter 6 in., to 10 ft; casing diameter 2 in., from 10 to 340 ft; screen diameter 2 in., from 340 to 350 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 113.90 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.82 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

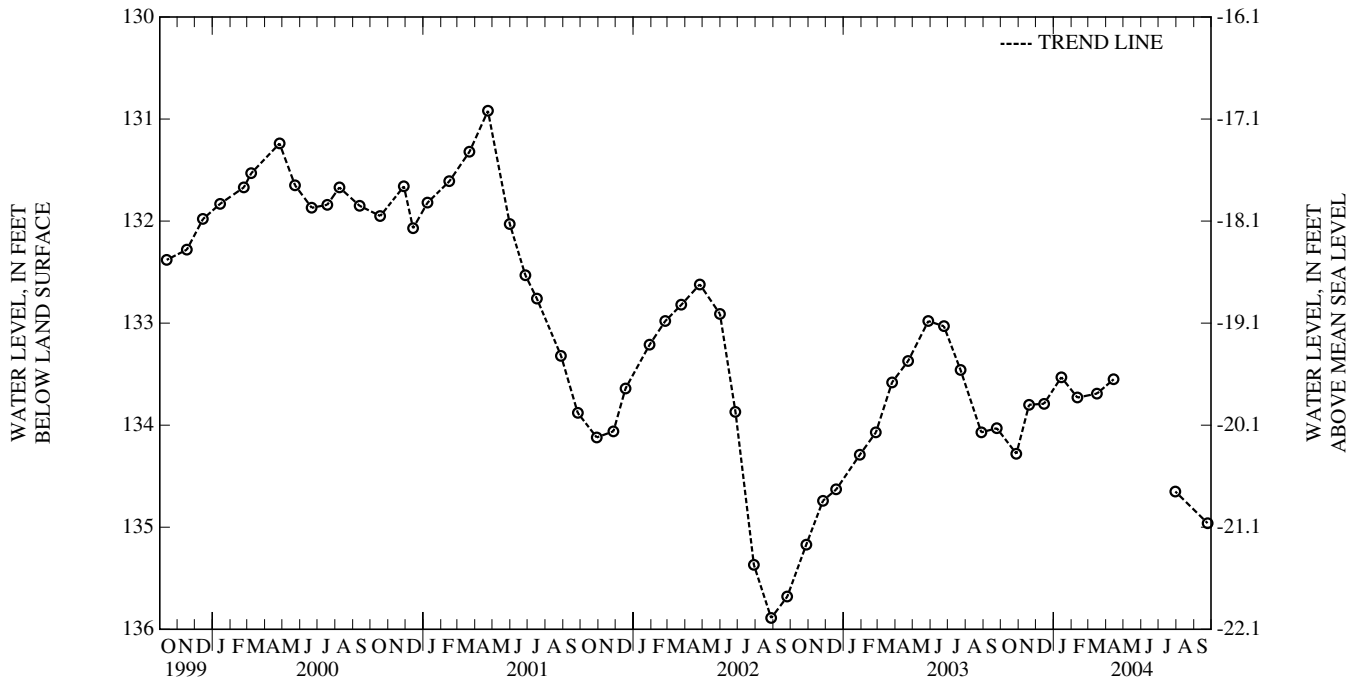
PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.50 ft below land surface, October 5, 1976; lowest measured, 135.89 ft below land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	134.28	JAN 14, 2004	133.53	APR 14, 2004	133.55
NOV 19	133.80	FEB 11	133.73	JUL 30	134.65
DEC 15	133.79	MAR 16	133.69	SEP 24	134.96

HIGHEST 133.53 JAN 14, 2004
 LOWEST 134.96 SEP 24, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

WELL NUMBER.--CA Gd 6. SITE ID.--381952076270901.

LOCATION.--Lat 38°19'52", long 76°27'09", Hydrologic Unit 02060006, at the Lord Calvert Yacht Club, 0.5 mi northeast of Solomons. Owner: Calvert Marina.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 493 ft; casing diameter 8 in., to 272 ft; casing diameter 6 in., from 272 to 472 ft; screened from 472 to 493 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with a graphic water-level recorder from October 1949 to February 1960.

DATUM.--Elevation of land surface is 12.73 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of sanitary seal, 1.59 ft above land surface.

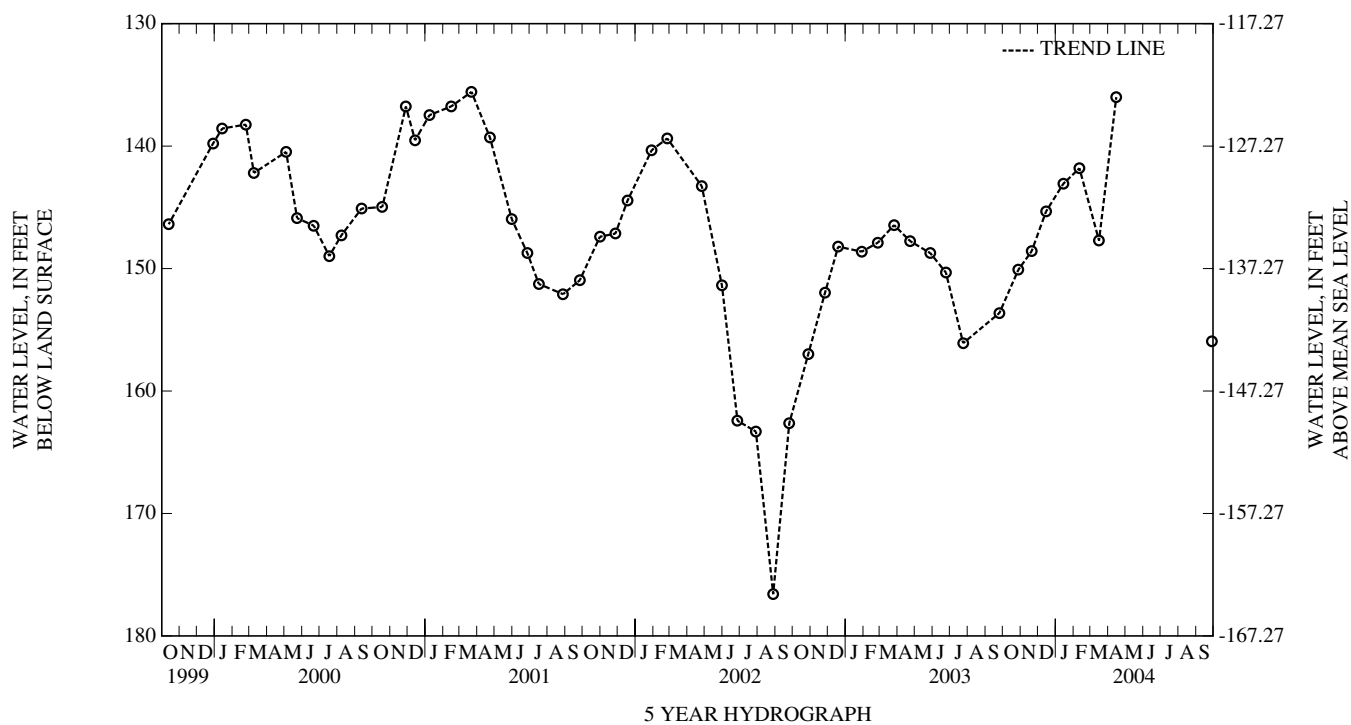
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level reported at land surface 1942, and the water level measured 58.90 ft below land surface on January 13, 1944. The well was not measured from April through July 1988 during building construction at well site. On July 18, 1991 the water-level measured 119.93 ft below land surface due to an extended period of pumping. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.-- October 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.21 ft below land surface, May 19, 1950; lowest measured, 176.59 ft below land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	150.09	DEC 15, 2003	145.34	FEB 11, 2004	141.81	APR 15, 2004	136.00
NOV 20	148.58	JAN 14, 2004	143.07	MAR 16	147.71	SEP 28	155.94
HIGHEST 136.00 APR 15, 2004							
LOWEST 155.94 SEP 28, 2004							

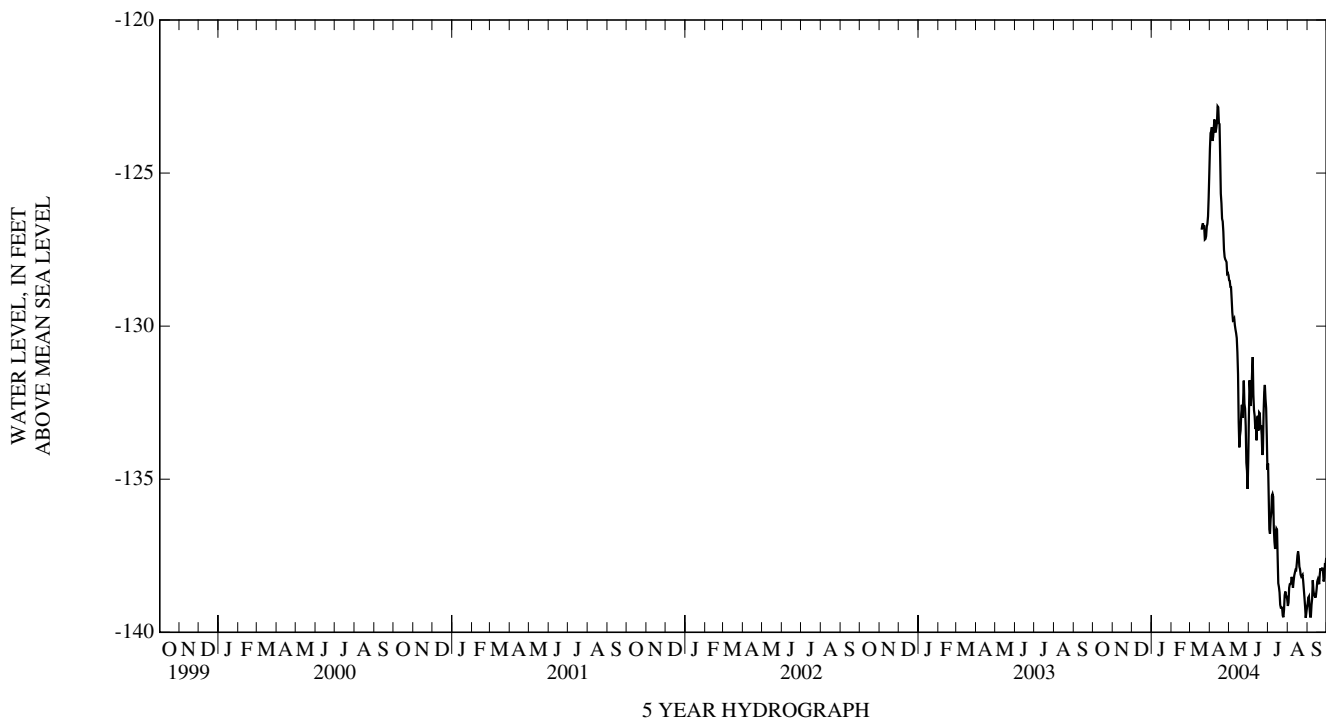


OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CALVERT COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-123.44	-124.20	-128.12	-128.50	-131.77	-132.89	-134.09	-134.49	-138.65	-139.14	-138.54	-139.06
2	-123.39	-123.69	-128.14	-128.52	-131.10	-131.77	-134.31	-135.56	-138.44	-139.03	-138.51	-138.87
3	-123.04	-123.64	-128.17	-128.72	-131.00	-132.16	-135.44	-136.64	-137.98	-138.55	-138.42	-138.83
4	-122.99	-123.50	-128.48	-128.73	-132.12	-132.61	-136.30	-136.78	-138.01	-138.43	-138.49	-139.23
5	-123.41	-123.95	-128.49	-129.12	-131.33	-132.12	-135.50	-136.30	-137.98	-138.42	-139.13	-139.49
6	-123.48	-123.82	-129.02	-129.55	-130.90	-131.51	-135.36	-136.10	-137.93	-138.38	-138.92	-139.49
7	-123.06	-123.53	-129.20	-129.81	-130.51	-131.01	-134.58	-135.54	-137.85	-138.19	-138.74	-139.11
8	-122.83	-123.25	-129.43	-129.79	-130.51	-132.24	-134.84	-135.48	-137.98	-138.35	-138.27	-138.90
9	-122.93	-123.65	-129.36	-129.75	-132.24	-132.75	-135.04	-135.57	-138.26	-138.55	-137.83	-138.30
10	-123.28	-123.65	-129.50	-129.97	-131.85	-132.93	-135.32	-136.61	-138.02	-138.33	-138.23	-138.63
11	-123.01	-123.52	-129.67	-130.11	-132.62	-133.36	-136.61	-137.04	-137.83	-138.15	-138.46	-138.78
12	-122.66	-123.34	-129.93	-130.23	-132.24	-133.30	-136.76	-137.28	-137.74	-138.05	-138.38	-138.77
13	-122.39	-122.82	-130.16	-130.39	-132.99	-133.73	-136.32	-136.76	-137.57	-137.96	-138.40	-138.87
14	-122.39	-122.85	-130.31	-130.86	-132.09	-132.99	-136.29	-136.61	-137.70	-137.97	-138.49	-138.79
15	-122.82	-123.37	-130.82	-131.57	-131.89	-132.93	-136.18	-136.65	-137.41	-137.75	-138.06	-138.59
16	-123.01	-123.40	-131.57	-133.12	-132.82	-133.41	-136.57	-137.54	-137.19	-137.49	-137.96	-138.34
17	-123.29	-124.49	-133.10	-133.96	-132.04	-132.82	-137.48	-138.40	-136.96	-137.36	-137.69	-138.27
18	-124.49	-125.67	-132.88	-133.58	-131.72	-132.85	-138.07	-138.52	-137.11	-137.52	-137.39	-138.35
19	-125.50	-125.99	-132.87	-133.41	-132.85	-133.36	-138.26	-138.70	-137.28	-137.86	-137.91	-138.43
20	-125.76	-126.49	-132.04	-132.87	-132.62	-133.24	-138.30	-139.10	-137.55	-137.94	-137.58	-138.11
21	-126.24	-126.58	-131.90	-132.57	-132.22	-133.56	-138.73	-139.20	-137.64	-138.12	-137.56	-137.91
22	-126.34	-126.92	-132.40	-133.00	-133.56	-134.21	-138.82	-139.20	-137.92	-138.18	-137.67	-137.96
23	-126.84	-127.50	-131.32	-132.40	-132.83	-134.06	-138.83	-139.20	-137.75	-138.15	-137.64	-137.95
24	-127.30	-127.74	-130.80	-131.78	-132.08	-132.83	-138.96	-139.46	-137.75	-138.12	-137.50	-137.89
25	-127.49	-127.82	-131.78	-132.54	-131.47	-132.14	-139.16	-139.51	-137.95	-138.34	-137.61	-138.00
26	-127.50	-127.86	-131.63	-132.69	-131.29	-131.92	-138.62	-139.26	-138.25	-138.61	-137.79	-138.34
27	-127.49	-127.91	-132.40	-133.27	-131.84	-132.38	-138.32	-138.79	-138.37	-138.87	-137.78	-138.23
28	-127.88	-128.29	-133.27	-134.46	-132.16	-132.68	-138.32	-138.67	-138.65	-139.17	-137.18	-137.79
29	-127.87	-128.27	-134.11	-134.73	-132.68	-133.60	-138.37	-138.78	-139.01	-139.53	-137.34	-137.80
30	-127.99	-128.33	-134.34	-135.32	-133.58	-134.69	-138.44	-138.83	-138.90	-139.35	-137.03	-137.57
31	---	---	-132.89	-134.34	---	---	-138.42	-138.93	-138.83	-139.18	---	---
MONTH	-122.39	-128.33	-128.12	-135.32	-130.51	-134.69	-134.09	-139.51	-136.96	-139.53	-137.03	-139.49
YEAR	-122.39	-139.53										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CAROLINE COUNTY

WELL NUMBER.--CO Bc 1. SITE ID.--390333075504501.

LOCATION.--Lat 39°03'33", long 75°50'45", Hydrologic Unit 02060005, at Baltimore Corner. Owner: Maryland State Highway Administration.

AQUIFER.--Pensauken Formation (fluvial facies) of Upper Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 20.5 ft; well point diameter 1.25 in., to 20.5 ft.

INSTRUMENTATION--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 54 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.10 ft below land surface.

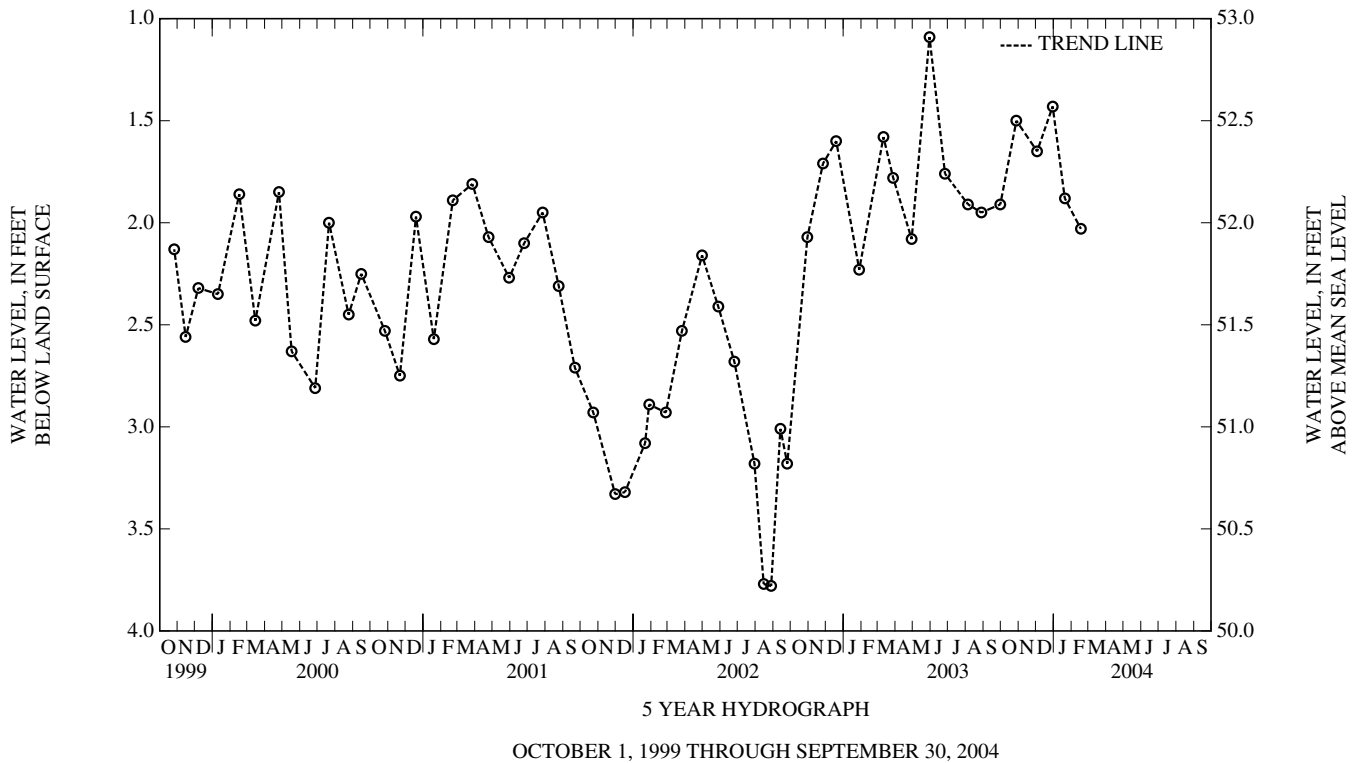
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--August 1949 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft above land surface, November 27, 1951; lowest measured, 4.37 ft below land surface, October 11, 1957.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	1.50	DEC 30, 2003	1.43	FEB 17, 2004	2.03
DEC 03	1.65	JAN 20, 2004	1.88		
HIGHEST	1.43	DEC 30, 2003			
LOWEST	2.03	FEB 17, 2004			



CAROLINE COUNTY--Continued

WELL NUMBER.--CO Bd 53. SITE ID.--390227075470201. PERMIT NUMBER.--CO-73-0541.

LOCATION.--Lat 39°02'27", long 75°47'02", Hydrologic Unit 02060005, near MD Rt. 311, Goldsboro. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 312 ft; casing diameter 6 in., to 70 ft; casing diameter 2 in., from 70 to 300 ft; screen diameter 2 in., from 300 to 312 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.45 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

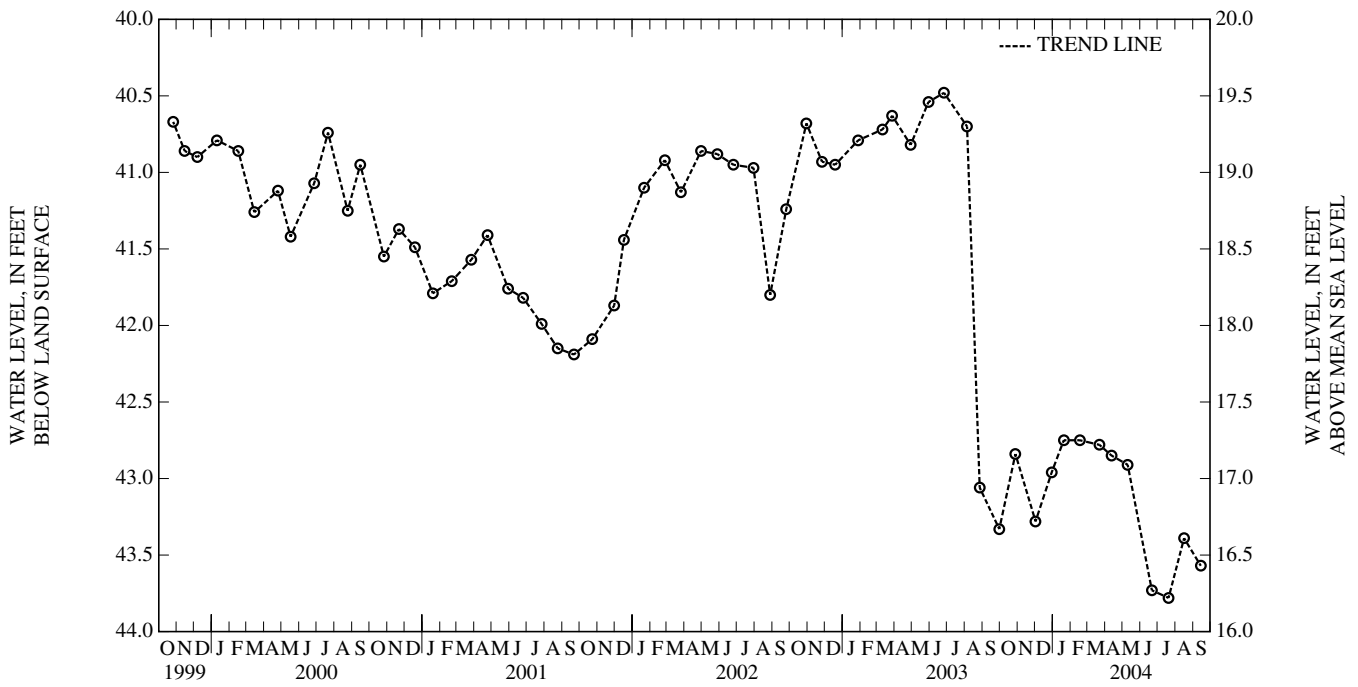
PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.64 ft below land surface, December 10, 1976; lowest measured, 43.78 ft below land surface, July 20, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	42.84	JAN 20, 2004	42.75	APR 12, 2004	42.85	JUL 20, 2004	43.78
DEC 02	43.28	FEB 17	42.75	MAY 10	42.91	AUG 16	43.39
30	42.96	MAR 22	42.78	JUN 21	43.73	SEP 14	43.57

HIGHEST 42.75 JAN 20, 2004 FEB 17, 2004
 LOWEST 43.78 JUL 20, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CAROLINE COUNTY--Continued

WELL NUMBER.--CO Dd 47. SITE ID.--385217075490601. PERMIT NUMBER.--CO-73-0486.

LOCATION.--Lat 38°52'17", long 75°49'06", Hydrologic Unit 02060005, Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 380 ft; casing diameter 4 in., to 100 ft; casing diameter 2 in., from 100 to 370 ft.; screened from 370 to 380 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46 ft above National Geodetic Vertical Datum of 1929. Measuring Point: Top of casing, 2.40 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well.

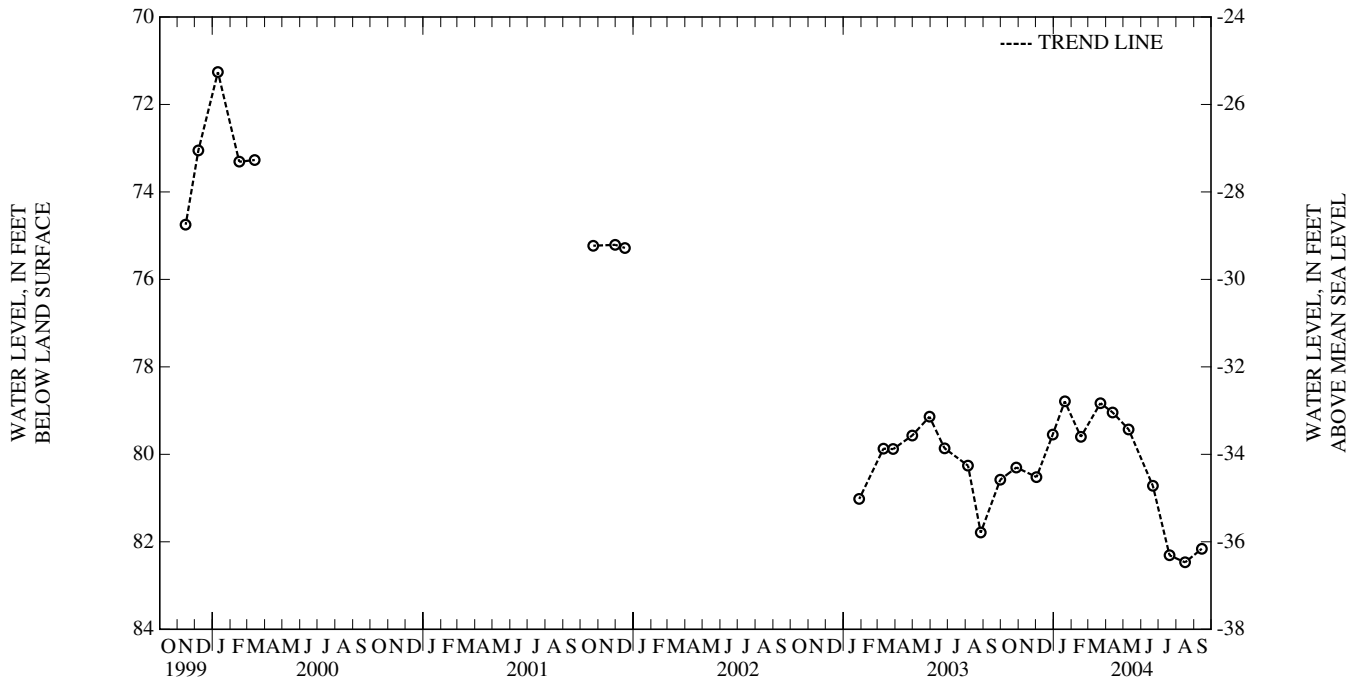
PERIOD OF RECORD.-- November 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.78 ft below land surface, May 27, 1976; lowest measured, 82.47 ft below land surface, August 16, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	80.30	JAN 20, 2004	78.79	APR 12, 2004	79.04	JUL 20, 2004	82.31
DEC 02 30	80.52	FEB 17	79.60	MAY 10	79.43	AUG 16	82.47
	79.55	MAR 22	78.83	JUN 21	80.72	SEP 14	82.16

HIGHEST 78.79 JAN 20, 2004
 LOWEST 82.47 AUG 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CARROLL COUNTY

WELL NUMBER.--CL Ad 47. SITE ID.--394008077005601. PERMIT NUMBER.--CL-73-3178.

LOCATION.--Lat 39°40'08", long 77°00'56", Hydrologic Unit 02070009, at Union Mills Homestead Park. Owner: U.S. Geological Survey.

AQUIFER.--Marburg Formation of Paleozoic age. Aquifer code: 300MRBG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 310 ft; casing diameter 6 in., to 35 ft.; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 540 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.97 ft above land surface.

REMARKS.--Collection of Basic Records (CBR) observation well.

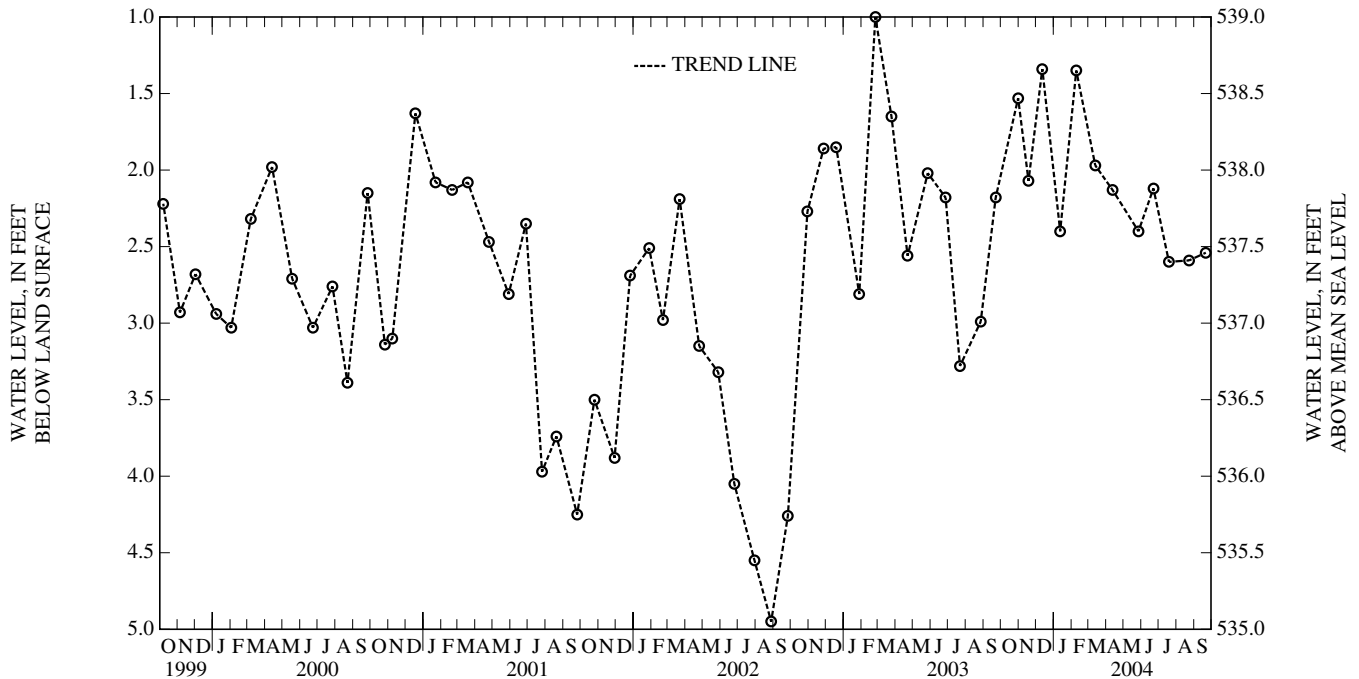
PERIOD OF RECORD.--August 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.00 ft below land surface, February 25, 2003; lowest measured, 4.95 ft below land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	1.53	JAN 12, 2004	2.40	APR 12, 2004	2.13	JUL 19, 2004	2.60
NOV 18	2.07	FEB 09	1.35	MAY 27	2.40	AUG 23	2.59
DEC 12	1.34	MAR 13	1.97	JUN 22	2.12	SEP 21	2.54

HIGHEST 1.34 DEC 12, 2003
 LOWEST 2.60 JUL 19, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CARROLL COUNTY--Continued

WELL NUMBER.--CL Bf 1. SITE ID.--393638076510001.

LOCATION.--Lat 39°36'38", long 76°51'00", Hydrologic Unit 02060003, on Hillcrest St., Hampstead. Owner: Town of Hampstead.

AQUIFER.--Prettyboy Schist of Paleozoic age. Aquifer code: 300PRTB.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 407 ft; casing diameter 8 in., to approximately 65 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder from July 1952 to November 1962.

DATUM.--Elevation of land surface is 933 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 2 in. casing extension, 2.35 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

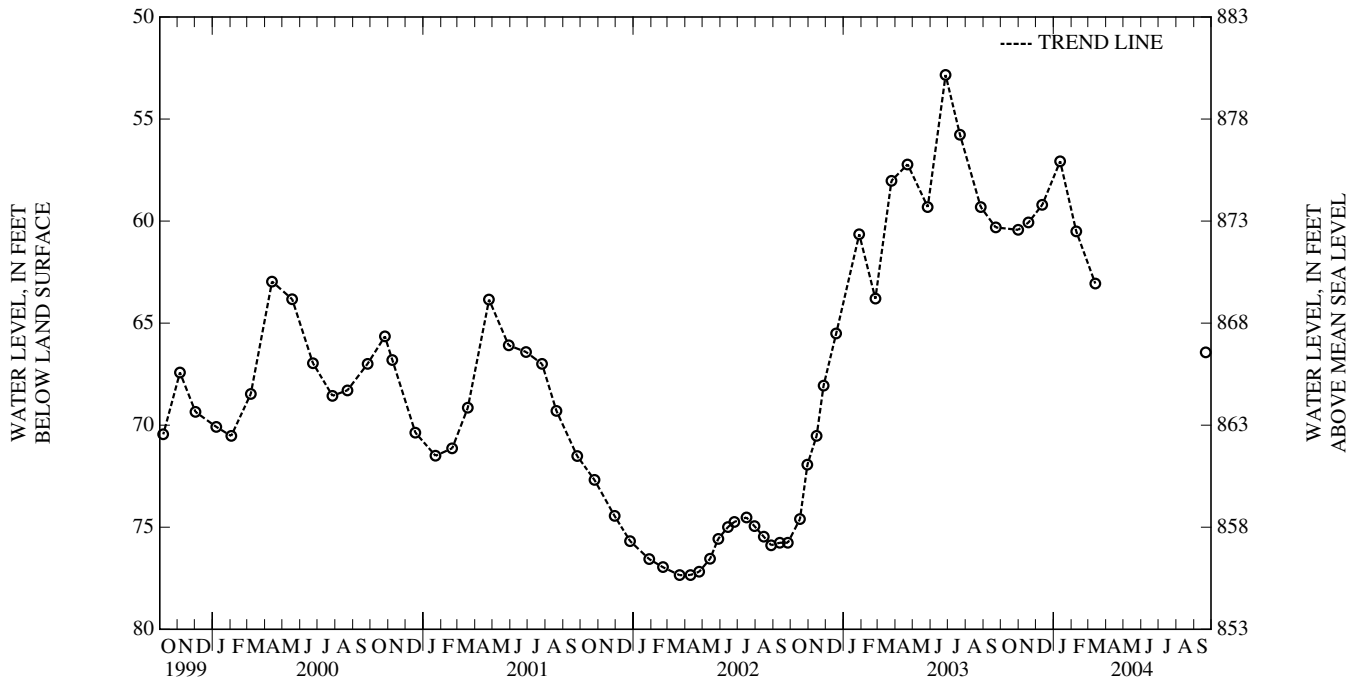
PERIOD OF RECORD.--September 1946 and December 1946, April 1947 and September 1947, February 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.10 ft below land surface, June 13, 1989; lowest measured, 77.35 ft below land surface, March 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	60.43	DEC 12, 2003	59.20	FEB 09, 2004	60.51	SEP 21, 2004	66.43
NOV 18	60.07	JAN 12, 2004	57.07	MAR 13	63.06		

HIGHEST 57.07 JAN 12, 2004
 LOWEST 66.43 SEP 21, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CARROLL COUNTY--Continued

WELL NUMBER.--CL Bf 184. SITE ID.--393754076512401. PERMIT NUMBER.--CL-73-6466.

LOCATION.--Lat 39°37'54", long 76°51'24", Hydrologic Unit 02060003, near Utz Rd., Greenmount. Owner: U.S. Geological Survey.

AQUIFER.--Prettyboy Schist (calcareous zone) of Paleozoic age. Aquifer code: 300PRTB.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 339 ft; casing diameter 6 in., to 50 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 785 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.81 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

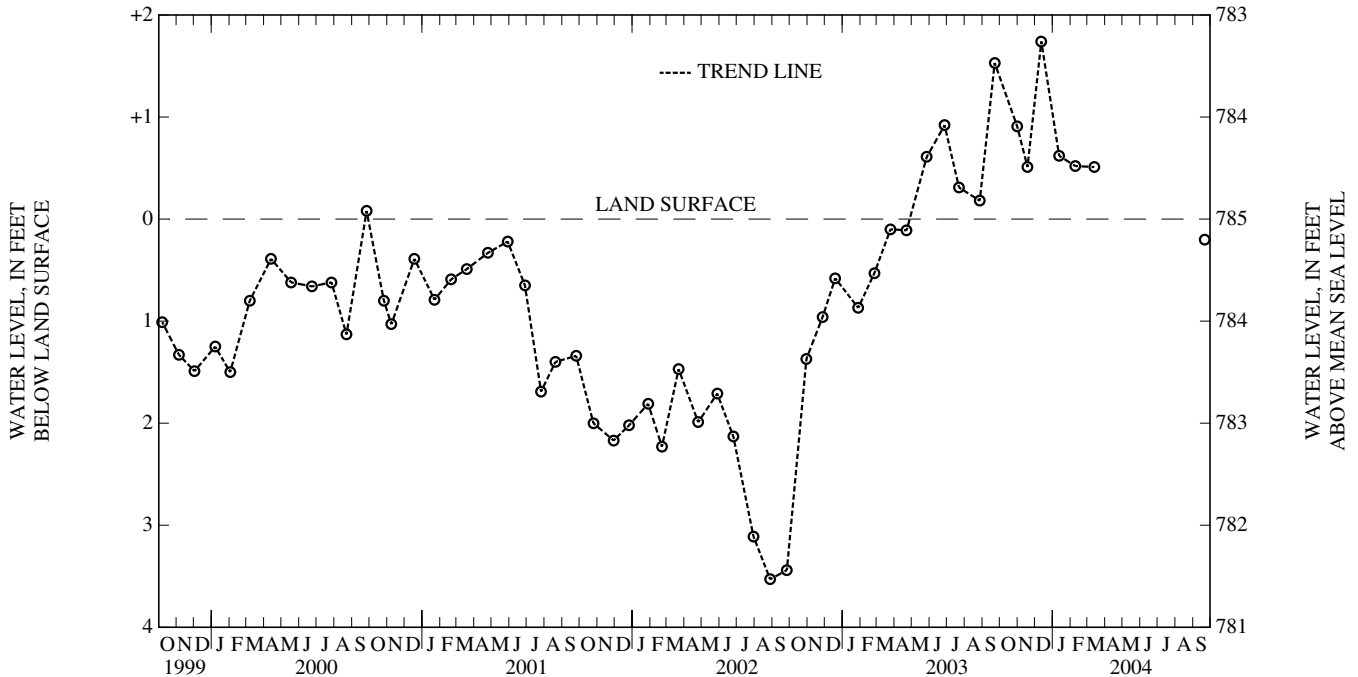
PERIOD OF RECORD.--August 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.81 ft above land surface, December 3, 1996, and January 2, 1997; lowest measured, 3.53 ft below land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	+0.91	DEC 12, 2003	+1.74	FEB 09, 2004	+0.52	SEP 21, 2004	.20
NOV 18	+0.51	JAN 12, 2004	+0.62	MAR 13	+0.51		

HIGHEST +1.74 DEC 12, 2003
LOWEST .20 SEP 21, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CARROLL COUNTY--Continued

WELL NUMBER.--CL Ec 75. SITE ID.--392259077052401. PERMIT NUMBER.--CL-73-2722.

LOCATION.--Lat 39°22'59", long 77°05'24", Hydrologic Unit 02060003, 2.3 mi northwest of Woodbine, at Gillis Falls Park. Owner: U.S. Geological Survey.

AQUIFER.--Gillis Group of Ordovician age. Aquifer code: 300GLLS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 248 ft; casing diameter 6 in., to 21 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1990 to April 1998. Equipped with graphic recorder December 1974 to July 1980.

DATUM.--Elevation of land surface is 550 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.31 ft above land surface.

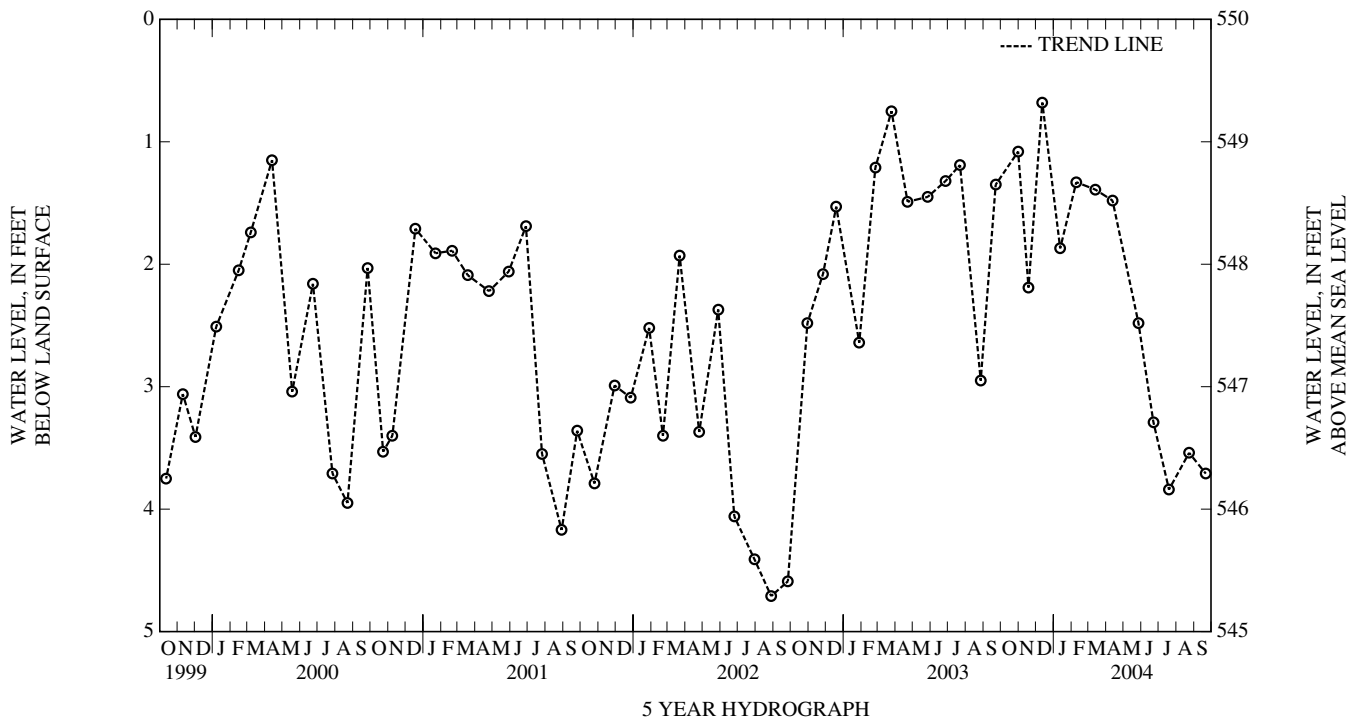
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--March 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.68 ft below land surface, December 12, 2003; lowest measured, 5.23 ft below land surface, August 7, 1985.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	1.08	JAN 12, 2004	1.87	APR 12, 2004	1.48	JUL 19, 2004	3.84
NOV 18	2.19	FEB 09	1.33	MAY 27	2.48	AUG 23	3.54
DEC 12	.68	MAR 13	1.39	JUN 22	3.29	SEP 21	3.71
HIGHEST	.68	DEC 12, 2003					
LOWEST	3.84	JUL 19, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY

WELL NUMBER.--CE Be 73. SITE ID.--393637075535001. PERMIT NUMBER.--CE-81-0464.

LOCATION.--Lat 39°36'37", long 75°53'50", Hydrologic Unit 02060002, 2 mi west of Elkton near US Rt. 40. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 152 ft; casing diameter 2 in., to 147 ft; screen diameter 2 in., from 147 to 152 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.95 ft above land surface.

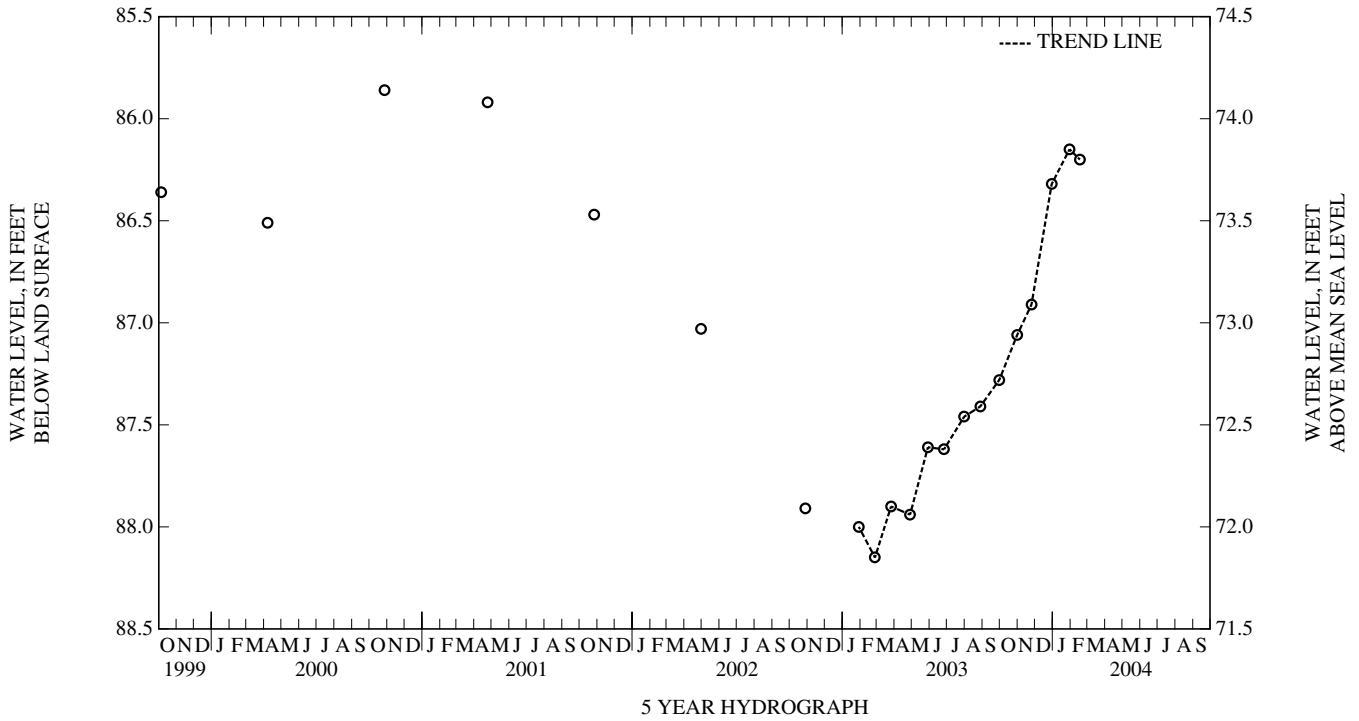
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.06 ft below land surface, July 31, 1984; lowest measured, 88.15 ft below land surface, February 26, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	87.06	DEC 30, 2003	86.32	FEB 17, 2004	86.20
NOV 25	86.91	JAN 30, 2004	86.15		
HIGHEST 86.15 JAN 30, 2004					
LOWEST 88.06 OCT 31, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Be 74. SITE ID.--393637075535002. PERMIT NUMBER.--CE-81-0464.

LOCATION.--Lat 39°36'37", long 75°53'50", Hydrologic Unit 02060002, 2 mi west of Elkton near US Rt. 40. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 115 ft; casing diameter 2 in., to 110 ft; screen diameter 2 in., from 110 to 115 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from April 1988 to January 2003.

DATUM.--Elevation of land surface is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

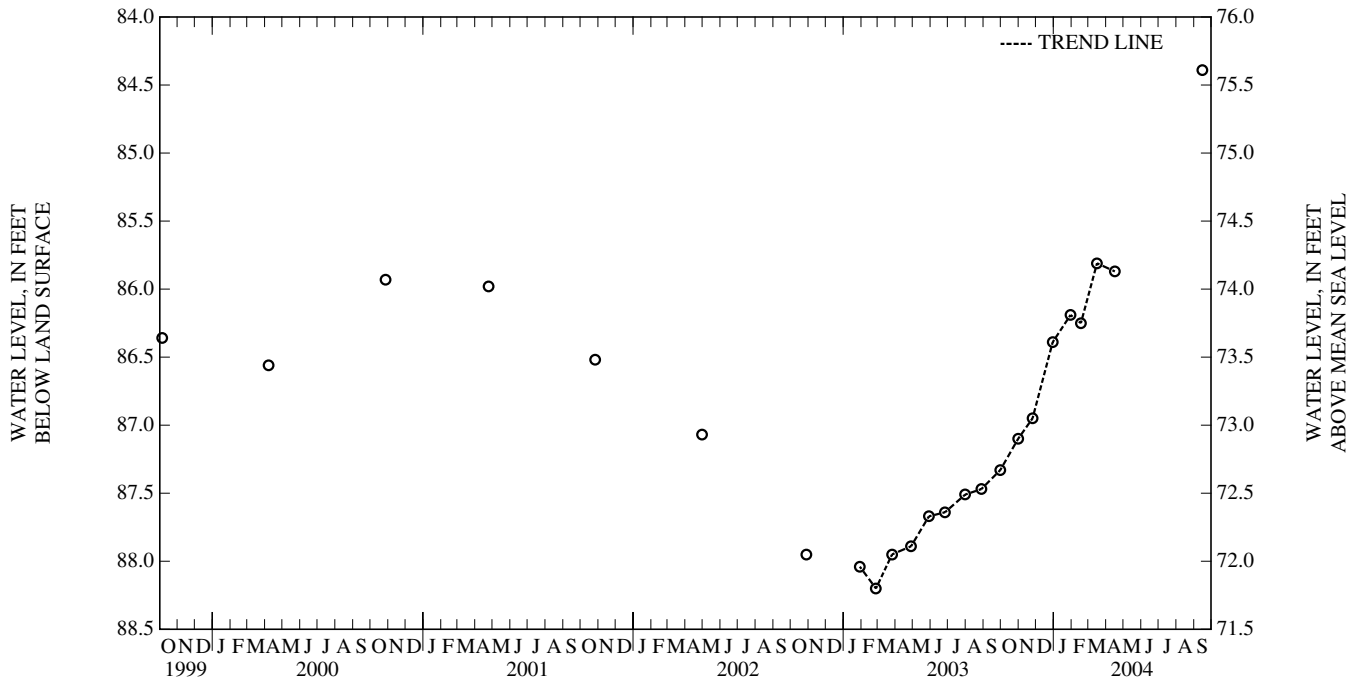
PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.12 ft below land surface, July 31, 1984; lowest measured, 88.20 ft below land surface, February 26, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	87.10	DEC 30, 2003	86.39	FEB 17, 2004	86.25	APR 16, 2004	85.87
NOV 25	86.95	JAN 30, 2004	86.19	MAR 16	85.81	SEP 15	84.39

HIGHEST 84.39 SEP 15, 2004
 LOWEST 87.10 OCT 31, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Bf 82. SITE ID.--393537075492001. PERMIT NUMBER.--CE-81-0470.

LOCATION.--Lat 39°35'37", long 75°49'20", Hydrologic Unit 02060002, at Holly Hall Elementary School, Elkton. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 125 ft; casing diameter 4 in., to 120 ft; screen diameter 2 in., from 120 to 125 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder July 1983 to November 1984.

DATUM.--Elevation of land surface is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

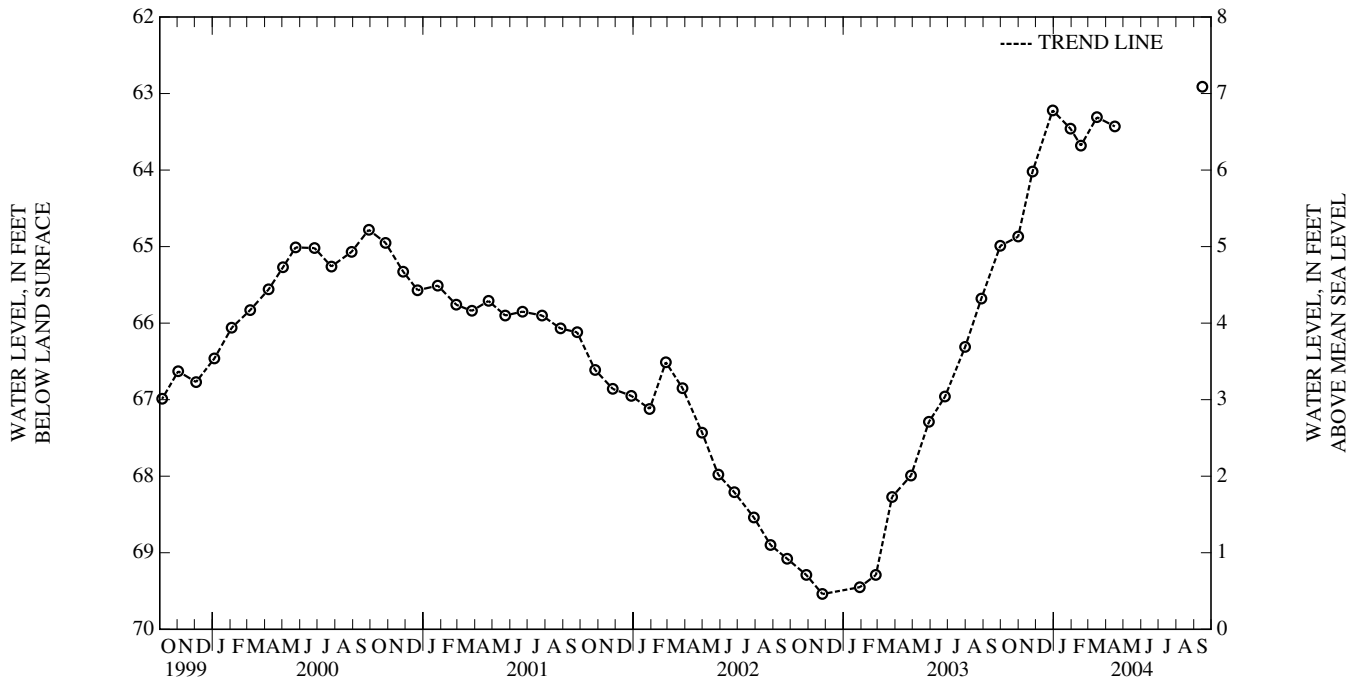
PERIOD OF RECORD.--February 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.13 ft below land surface, July 1, 1983; lowest measured, 69.54 ft below land surface, November 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	64.87	DEC 30, 2003	63.22	FEB 17, 2004	63.68	APR 16, 2004	63.43
NOV 25	64.02	JAN 30, 2004	63.46	MAR 16	63.31	SEP 15	62.91

HIGHEST 62.91 SEP 15, 2004
 LOWEST 64.87 OCT 31, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Cd 51. SITE ID.--393432075593601. PERMIT NUMBER.--CE-81-0440.

LOCATION.--Lat 39°34'32", long 75°59'36", Hydrologic Unit 02060002, near intersection of MD Rts. 7 and 267, 1 mi west of Charlestown. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 125 ft; casing diameter 4 in., to 120 ft; screen diameter 2 in., from 120 to 125 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly measurements from April 1988 to January 2003.

DATUM.--Elevation of land surface is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.12 ft above land surface.

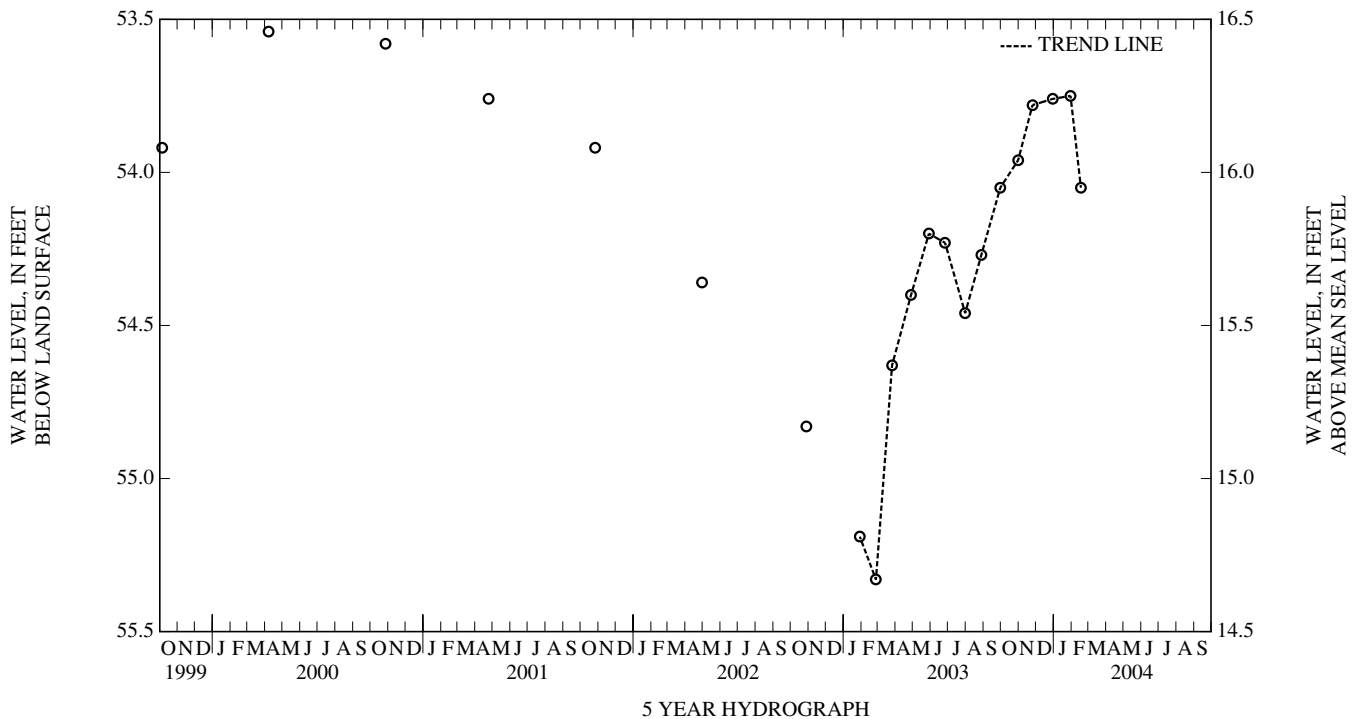
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.80 ft below land surface, April 6, 1984; lowest measured, 55.33 ft below land surface, February 26, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	53.96	DEC 30, 2003	53.76	FEB 17, 2004	54.05
NOV 25	53.78	JAN 30, 2004	53.75		
HIGHEST 53.75 JAN 30, 2004					
LOWEST 54.05 FEB 17, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Cd 52. SITE ID.--393432075593602. PERMIT NUMBER.--CE-81-0440.

LOCATION.--Lat 39°34'32", long 75°59'36", Hydrologic Unit 02060002, near intersection of MD Rts. 7 and 267, 1 mi west of Charlestown. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 48 ft; casing diameter 4 in., to 43 ft; screen diameter 2 in., from 43 to 48 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.18 ft above land surface.

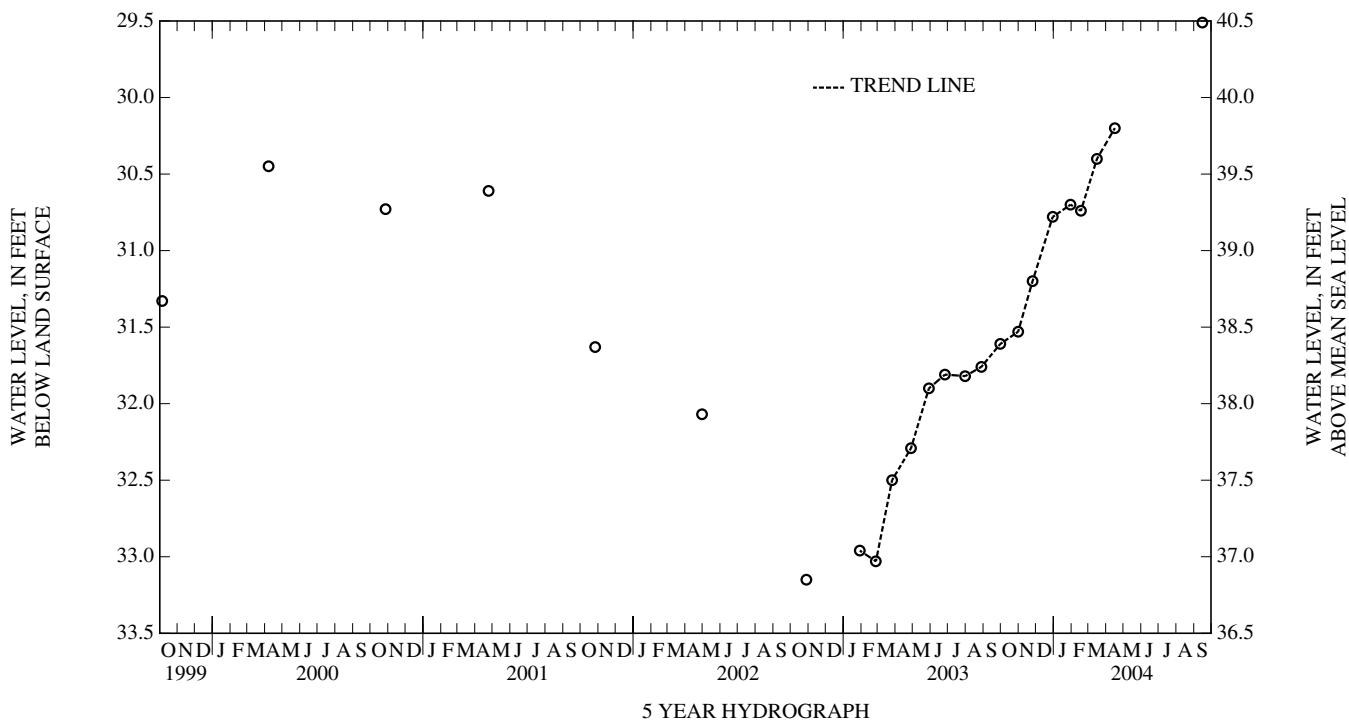
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.75 ft below land surface, July 5, 1983; lowest measured, 33.15 ft below land surface, October 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	31.53	DEC 30, 2003	30.78	FEB 17, 2004	30.74	APR 16, 2004	30.20
NOV 25	31.20	JAN 30, 2004	30.70	MAR 16	30.40	SEP 15	29.51
HIGHEST 29.51 SEP 15, 2004							
LOWEST 31.53 OCT 31, 2003							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Cd 53. SITE ID.--393216075564201. PERMIT NUMBER.--CE-81-0463.

LOCATION.--Lat 39°32'16", long 75°56'42", Hydrologic Unit 02060002, Elk Neck State Forest, 0.5 mi north of Black Hill Lookout Tower. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 350 ft; casing diameter 4 in., to 345 ft; screen diameter 2 in., from 345 to 350 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from July 1983 to October 1984.

DATUM.--Elevation of land surface is 135 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

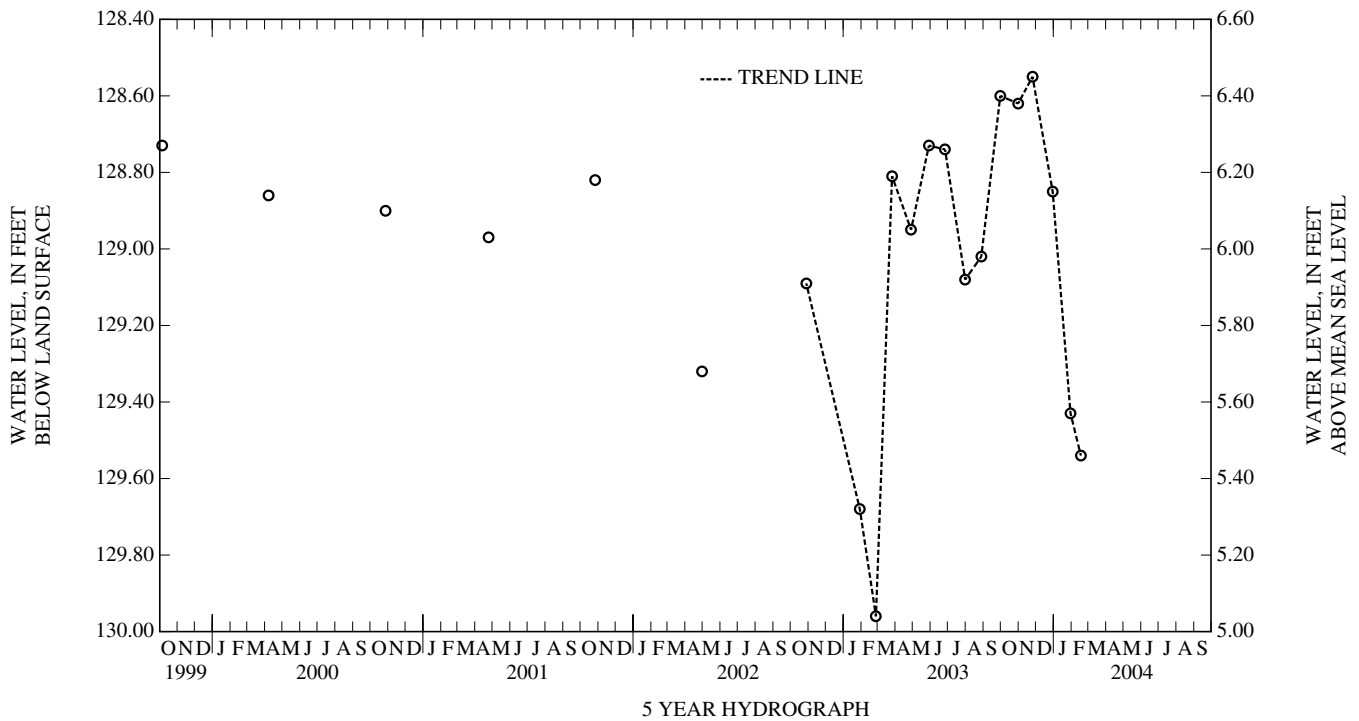
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--March 1983 to October 1984, October 1988 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 126.65 ft below land surface, April 6, 1984; lowest measured, 129.96 ft below land surface, February 26, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	128.62	DEC 30, 2003	128.85	FEB 17, 2004	129.54
NOV 25	128.55	JAN 30, 2004	129.43		
HIGHEST 128.55 NOV 25, 2003					
LOWEST 129.54 FEB 17, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Ce 54. SITE ID.--393433075544901. PERMIT NUMBER.--CE-81-0461.

LOCATION.--Lat 39°34'33", long 75°54'49", Hydrologic Unit 02060002, Elk Neck State Forest near Irishtown Road. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 250 ft; casing diameter 4 in., to 245 ft; screen diameter 2 in., from 245 to 250 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder July 1983 to November 1984.

DATUM.--Elevation of land surface is 180 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

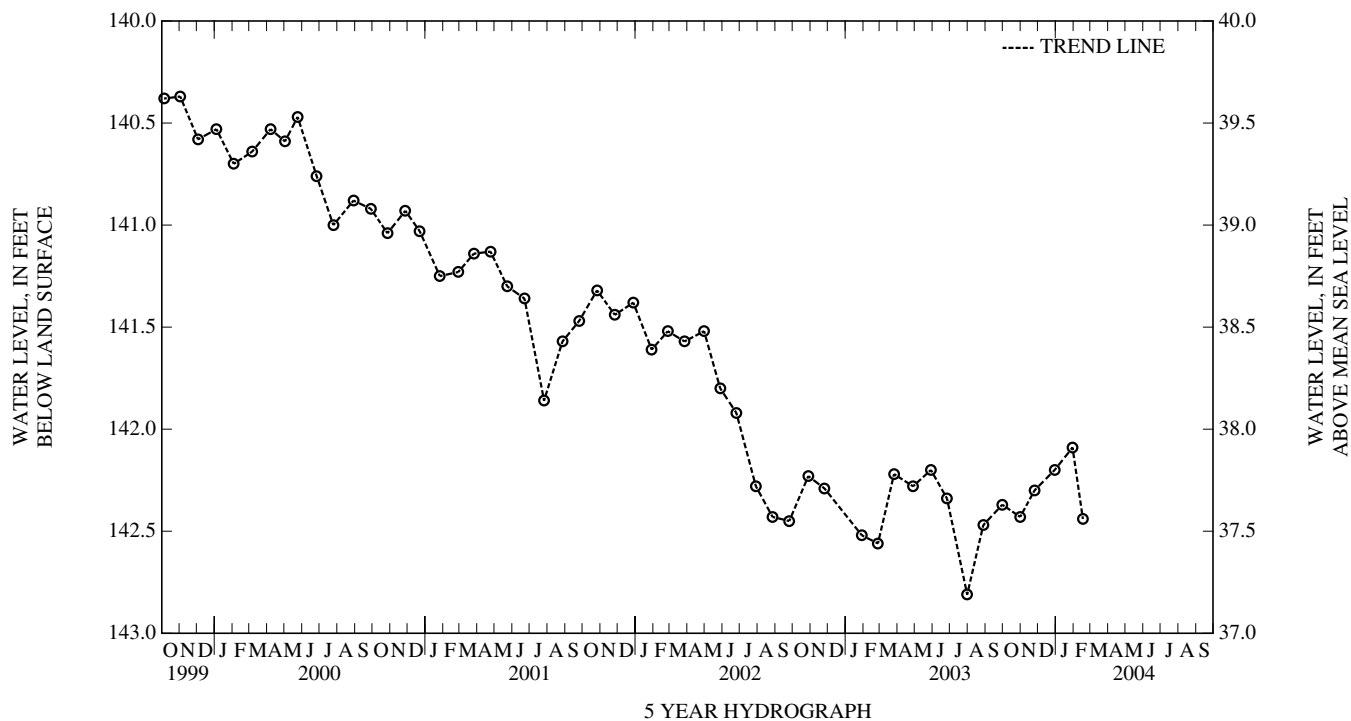
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--March 1983 to November 1984, July 1985 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 136.10 ft below land surface, March 29, 1984, April 6, 1984, and November 6, 1984; lowest measured, 142.81 ft below land surface, July 31, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	142.43	DEC 30, 2003	142.20	FEB 17, 2004	142.44
NOV 25	142.30	JAN 30, 2004	142.09		
HIGHEST 142.09 JAN 30, 2004					
LOWEST 142.44 FEB 17, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Ce 55. SITE ID.--393241075500201. PERMIT NUMBER.--CE-81-0465.

LOCATION.--Lat 39°32'41", long 75°50'02", Hydrologic Unit 02060002, Canal National Wildlife Refuge near Elk Forest Rd. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 375 ft; casing diameter 4 in., to 370 ft; screen diameter 2 in., from 370 to 375 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from July 1983 to November 1984.

DATUM.--Elevation of land surface is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.40 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

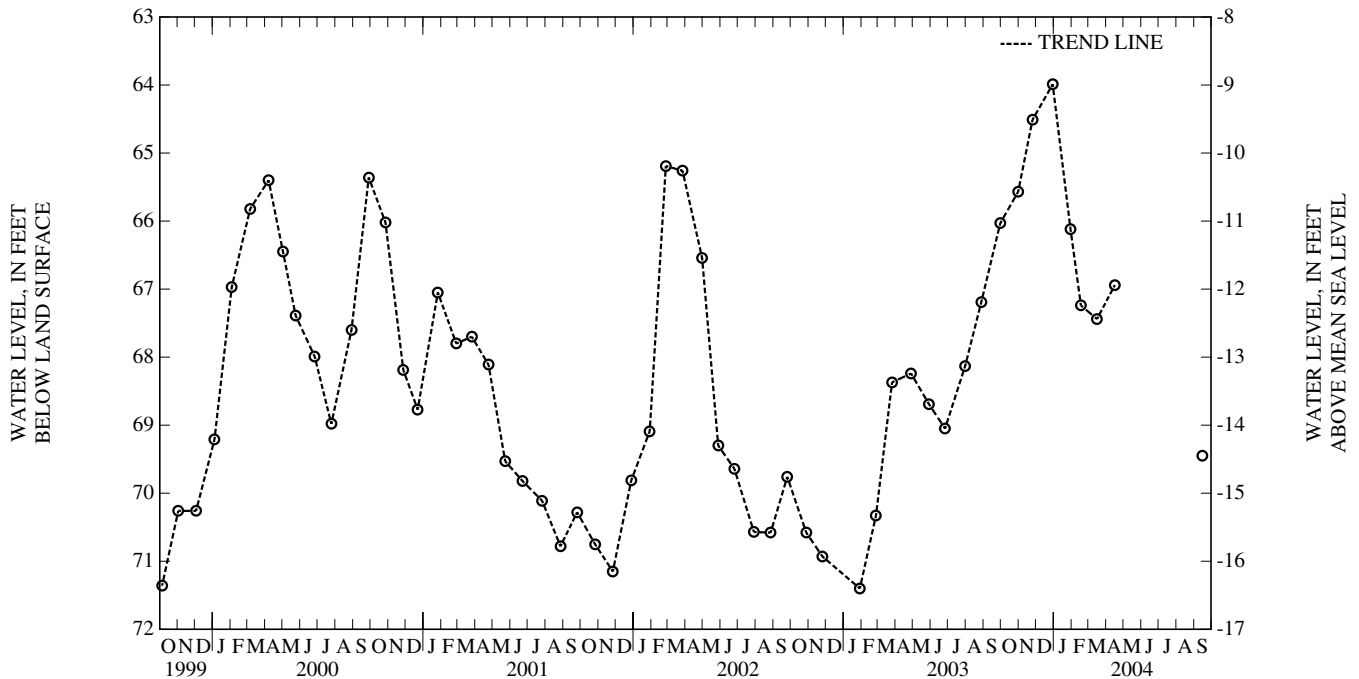
PERIOD OF RECORD.--March 1983 to November 1984, July 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.56 ft below land surface, April 17, 1984; lowest measured, 71.95 ft below land surface, August 4, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	65.57	DEC 30, 2003	63.99	FEB 17, 2004	67.24	APR 16, 2004	66.94
NOV 25	64.51	JAN 30, 2004	66.12	MAR 16	67.44	SEP 15	69.45

HIGHEST 63.99 DEC 30, 2003
 LOWEST 69.45 SEP 15, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Ce 56. SITE ID.--393026075523101. PERMIT NUMBER.--CE-81-0466.

LOCATION.--Lat 39°30'26", long 75°52'31", Hydrologic Unit 02060002, 1.2 mi east of Courthouse Point. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 121 ft; casing diameter 4 in., to 116 ft; screen diameter 2 in., from 116 to 121 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from April 1988 to April 1994.

DATUM.--Elevation of land surface is 38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

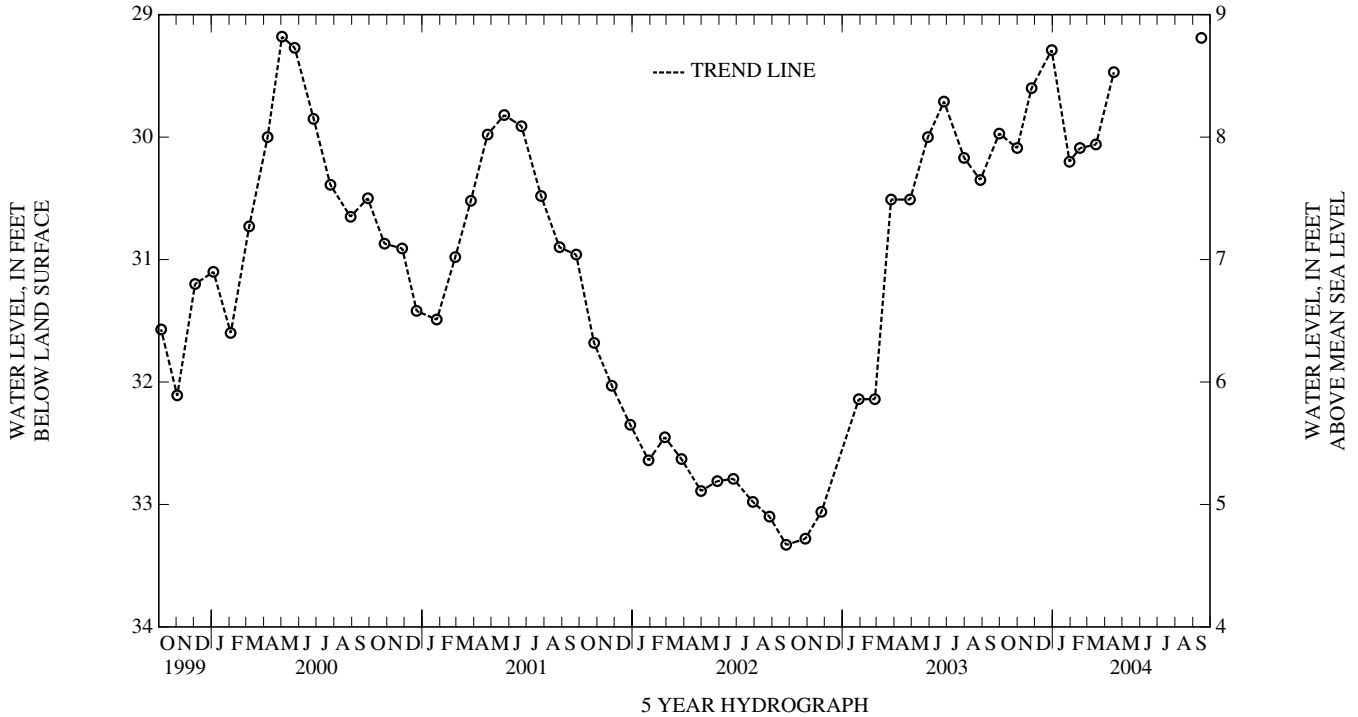
PERIOD OF RECORD.--April 1983 to September 1984, April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.42 ft below land surface, April 4, 1997; lowest measured, 34.48 ft below land surface, November 19, 1983.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	30.09	DEC 30, 2003	29.29	FEB 17, 2004	30.09	APR 16, 2004	29.47
NOV 25	29.60	JAN 30, 2004	30.20	MAR 16	30.06	SEP 15	29.19

HIGHEST 29.19 SEP 15, 2004
 LOWEST 30.20 JAN 30, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Ce 82. SITE ID.--393209075541301. PERMIT NUMBER.--CE-94-1417.

LOCATION.--Lat 39°32'09", long 75°54'13", Hydrologic Unit 02060002, 4.0 mi southeast of North East, at Village of Elk Neck, 0.1 mi north of Racine-School Rd. Owner: Stuart Associates.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 210 ft; casing diameter 4 in., to 205 ft; screen diameter 4 in., from 205 to 210 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

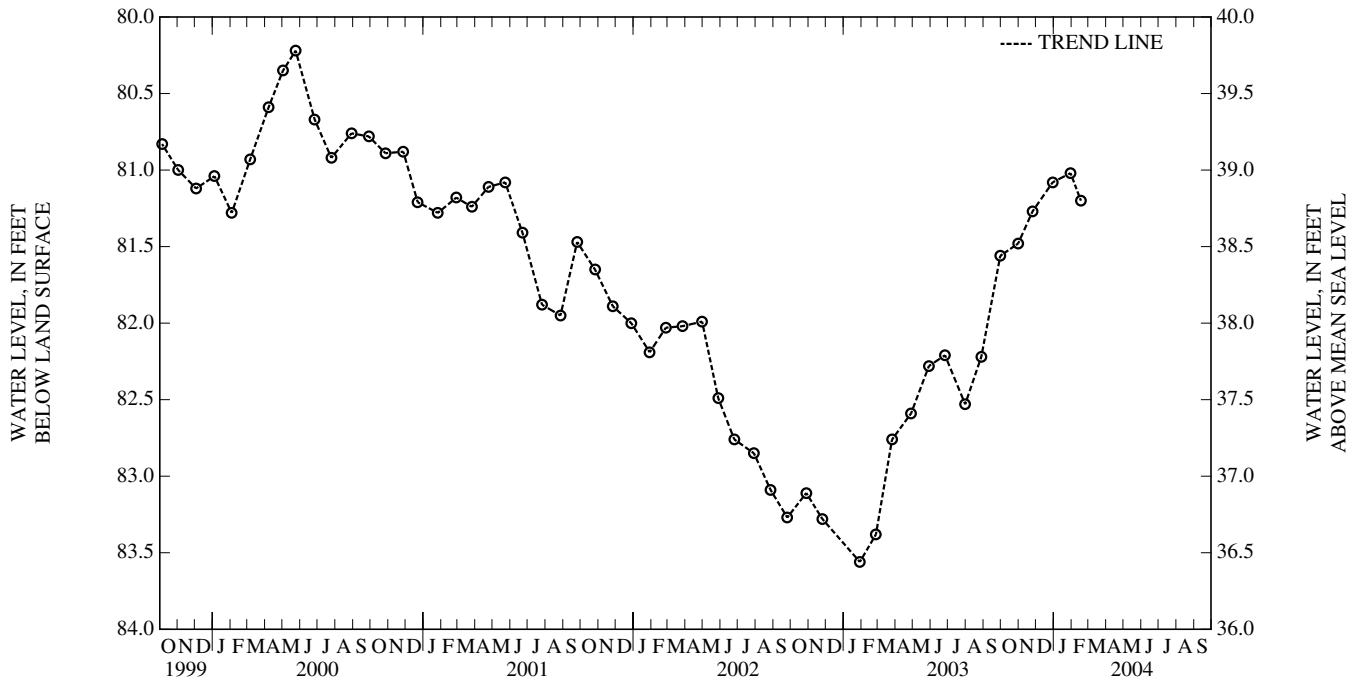
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--August 1996 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 78.01 ft below land surface, May 4, 1998; lowest measured, 83.56 ft below land surface, January 29, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	81.48	DEC 30, 2003	81.08	FEB 17, 2004	81.20
NOV 25	81.27	JAN 30, 2004	81.02		
HIGHEST 81.02 JAN 30, 2004					
LOWEST 81.48 OCT 31, 2003					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Dd 81. SITE ID.--392536075593201. PERMIT NUMBER.--CE-81-0469.

LOCATION.--Lat 39°25'36", long 75°59'32", Hydrologic Unit 02060002, at dredge spoil site, off Pond Neck Road, near West View Shores. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 115 ft; casing diameter 4 in., to 110 ft; screen diameter 2 in., from 110 to 115 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly measurements from April 1988 to April 1994.

DATUM.--Elevation of land surface is 24 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.80 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

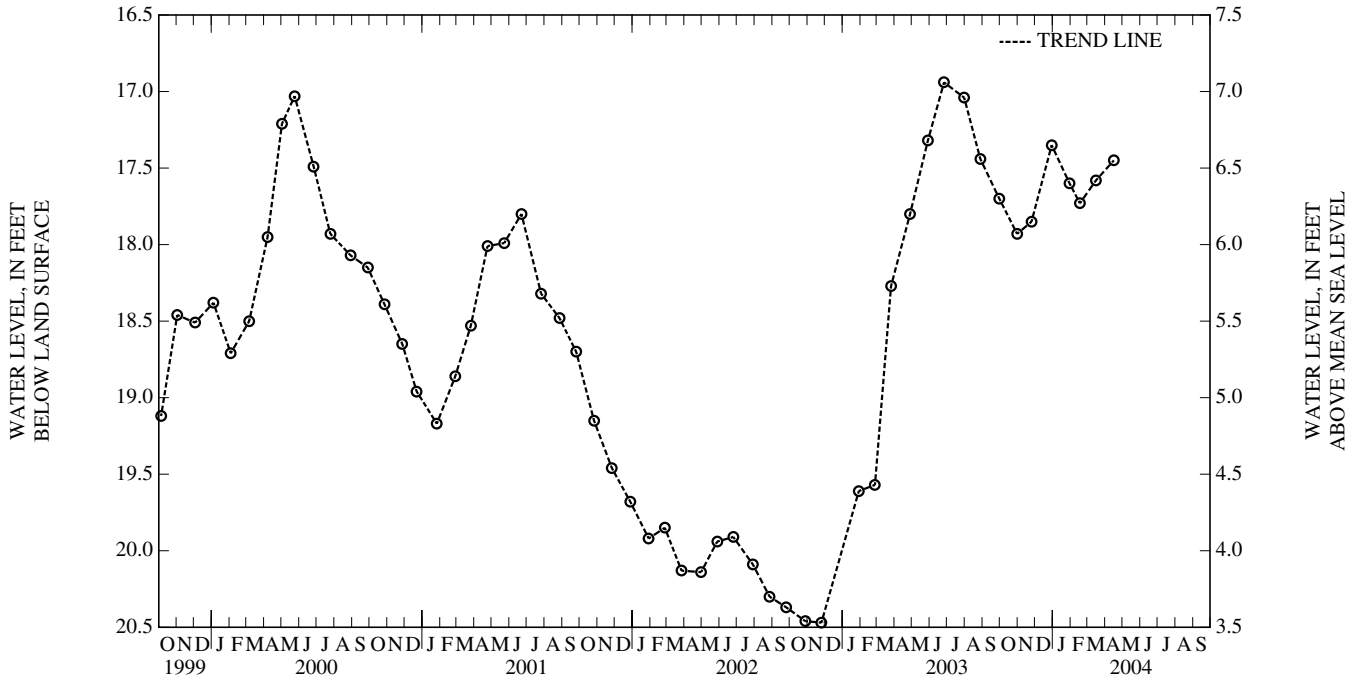
PERIOD OF RECORD.--March 1983 to October 1983, April 1988 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.25 ft below land surface, July 1, 1983; lowest measured, 20.47 ft below land surface, November 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	17.93	DEC 30, 2003	17.35	FEB 17, 2004	17.73	APR 16, 2004	17.45
NOV 25	17.85	JAN 30, 2004	17.60	MAR 16	17.58		

HIGHEST 17.35 DEC 30, 2003
 LOWEST 17.93 OCT 31, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CECIL COUNTY--Continued

WELL NUMBER.--CE Ee 29. SITE ID.--392403075521801. PERMIT NUMBER.--CE-73-2266.

LOCATION.--Lat 39°24'03", long 75°52'18", Hydrologic Unit 02060002, 0.3 mi southwest of MD Rts. 213 and 282, Cecilton. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 547 ft; casing diameter 10 in., to 158 ft; casing diameter 4 in., to 515 ft and 525 to 547 ft; screen diameter 4 in., from 515 to 525 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with a digital water-level recorder from August 1979 to December 1979.

DATUM.--Elevation of land surface is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.35 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

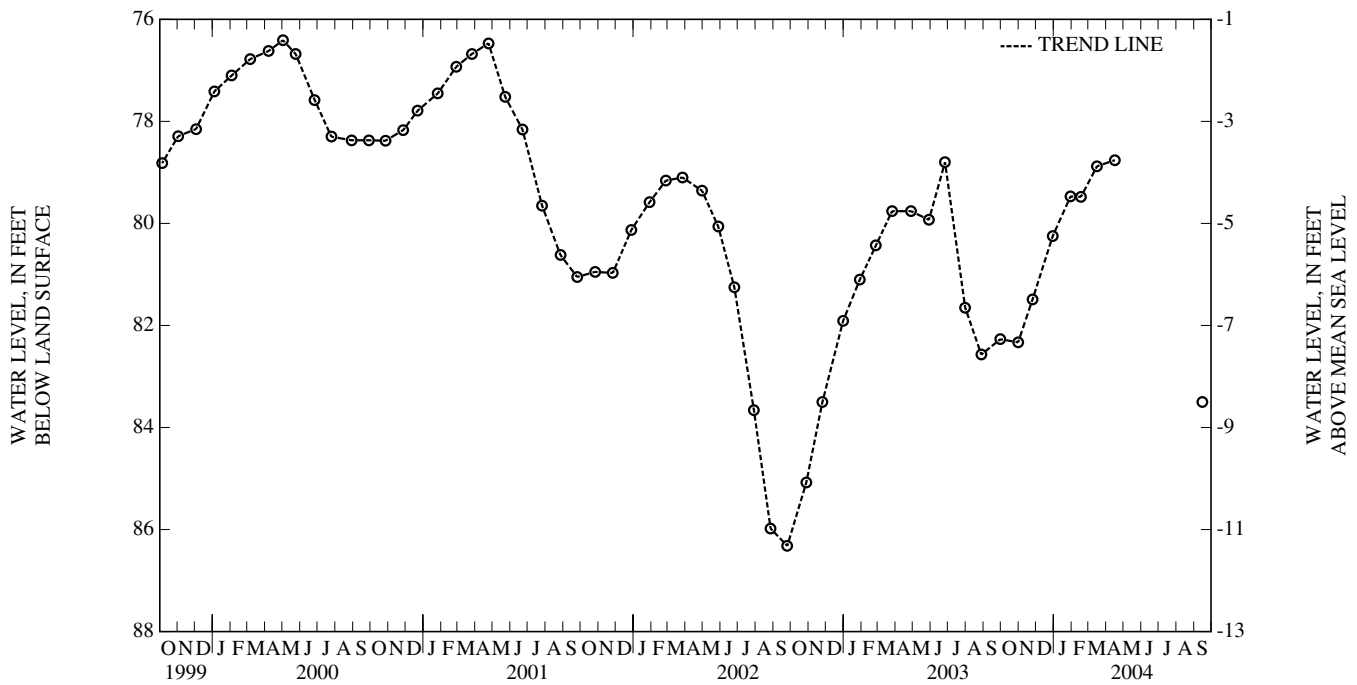
PERIOD OF RECORD.--August 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.99 ft below land surface, March 25, 1979; lowest measured, 86.32 ft below land surface, September 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	82.33	DEC 30, 2003	80.25	FEB 17, 2004	79.48	APR 16, 2004	78.76
NOV 25	81.49	JAN 30, 2004	79.47	MAR 16	78.88	SEP 15	83.50

HIGHEST 78.76 APR 16, 2004
 LOWEST 83.50 SEP 15, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bc 24. SITE ID.--383633077083001. PERMIT NUMBER.--CH-02-0874.

LOCATION.--Lat 38°36'33", long 77°08'30", Hydrologic Unit 0207001, at Cedar Lane, Potomac Heights. Owner: Potomac Heights Mutual Home Owners Association.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 435 ft; casing diameter 10 in., to 383.5 ft, and 398.5 to 415 ft; screen diameter 10 in., from 383.5 to 398.5 ft, and 415 to 435 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, April 1988 to November 1997. Equipped with digital water-level recorder--30-minute recorder interval, November 1997 to June 2000.

DATUM.--Elevation of land surface is 72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.55 ft above land surface.

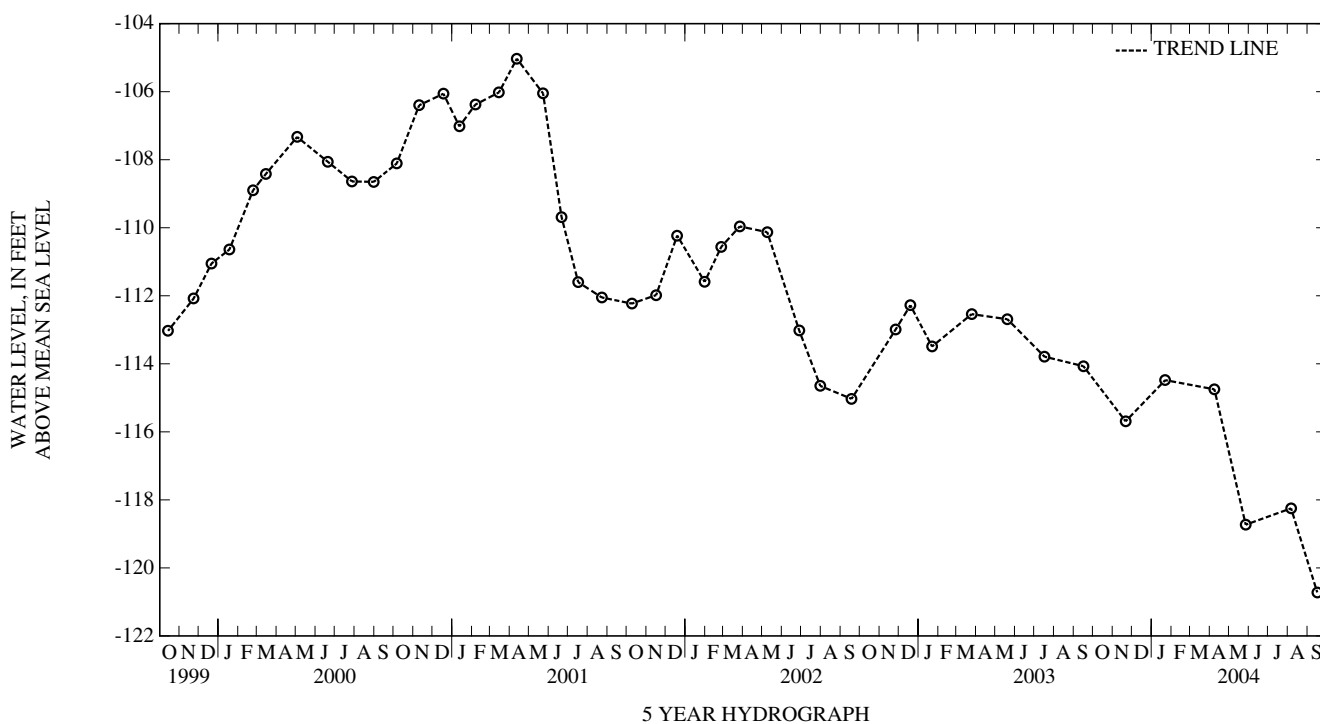
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.83 ft below sea level, March 31, 1988; lowest measured, 120.72 ft below sea level, September 16, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-115.69	APR 08, 2004	-114.75	AUG 06, 2004	-118.25
JAN 22, 2004	-114.48	MAY 27	-118.73	SEP 16	-120.72
LOWEST -120.72 SEP 16, 2004					
HIGHEST -114.48 JAN 22, 2004					



CHARLES COUNTY--Continued

WELL NUMBER.--CH Bc 75. SITE ID.--383645077062401. PERMIT NUMBER.--CH-92-0500.

LOCATION.--Lat 38°36'45", long 77°06'24", Hydrologic Unit 02070011, Chapmans Landing. Owner: Maryland Department of Natural Resources.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 940 ft; casing diameter 8 in., to 820 ft, 825 to 860 ft, 880 to 898 ft, and 923 to 940 ft; screen diameter 8 in., from 820 to 825 ft, 860 to 880 ft, and 898 to 923 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 124.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.98 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal. A 48-hour pump test occurred on November 18-20, 1996. The lowest water level measured during this period was 82.53 ft below sea level on November 20, 1996. The land surface was graded on October 16, 1998, and is 12.45 ft below the original land surface.

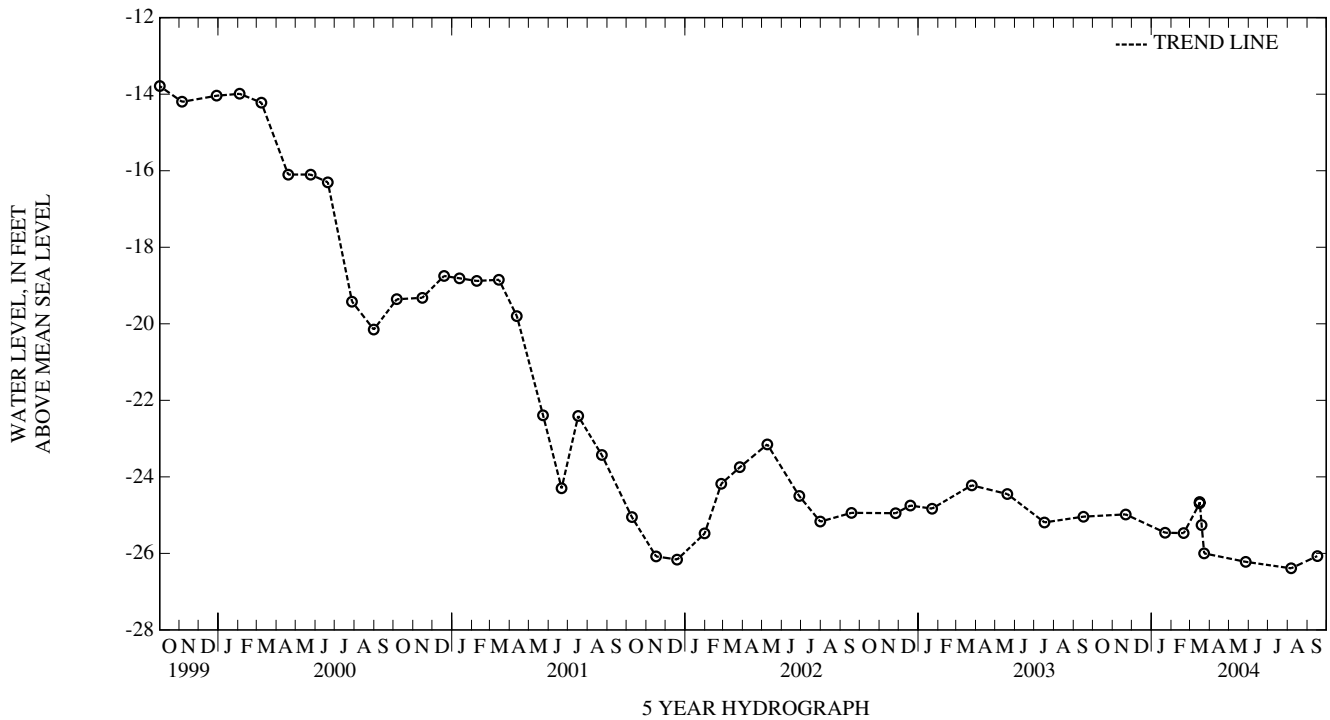
PERIOD OF RECORD.--June 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.64 ft above sea level, September 26, 1994; lowest measured, 26.39 ft below sea level, August 6, 2004 (See REMARKS).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-24.98	MAR 16, 2004	-24.69	MAR 23, 2004	-26.00	SEP 16, 2004	-26.07
JAN 22, 2004	-25.46	16	-24.66	MAY 27	-26.22		
FEB 20	-25.47	19	-25.26	AUG 06	-26.39		

LOWEST -26.39 AUG 06, 2004
 HIGHEST -24.66 MAR 16, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bc 77. SITE ID.--383644077055501. PERMIT NUMBER.--CH-88-1028.

LOCATION.--Lat 38°36'44", long 77°05'55", Hydrologic Unit 02070011, 2.75 mi southwest of intersection with MD Rts. 210 and 227, 0.25 mi south of MD Rt. 210. Owner: The Arden Group.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 955 ft; casing diameter 16 in., to 60 ft; casing diameter 8 in., from 0 to 845 ft; and casing diameter 6 in., from 845 to 925 ft; screen diameter 6 in., from 925 to 955 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, August 1995 to current year.

DATUM.--Elevation of land surface is 96.64 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 3.38 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal. A 48-hour pump test occurred in a nearby well on November 22 and 23, 1996. The lowest water level measured during this period was 15.54 ft below sea level.

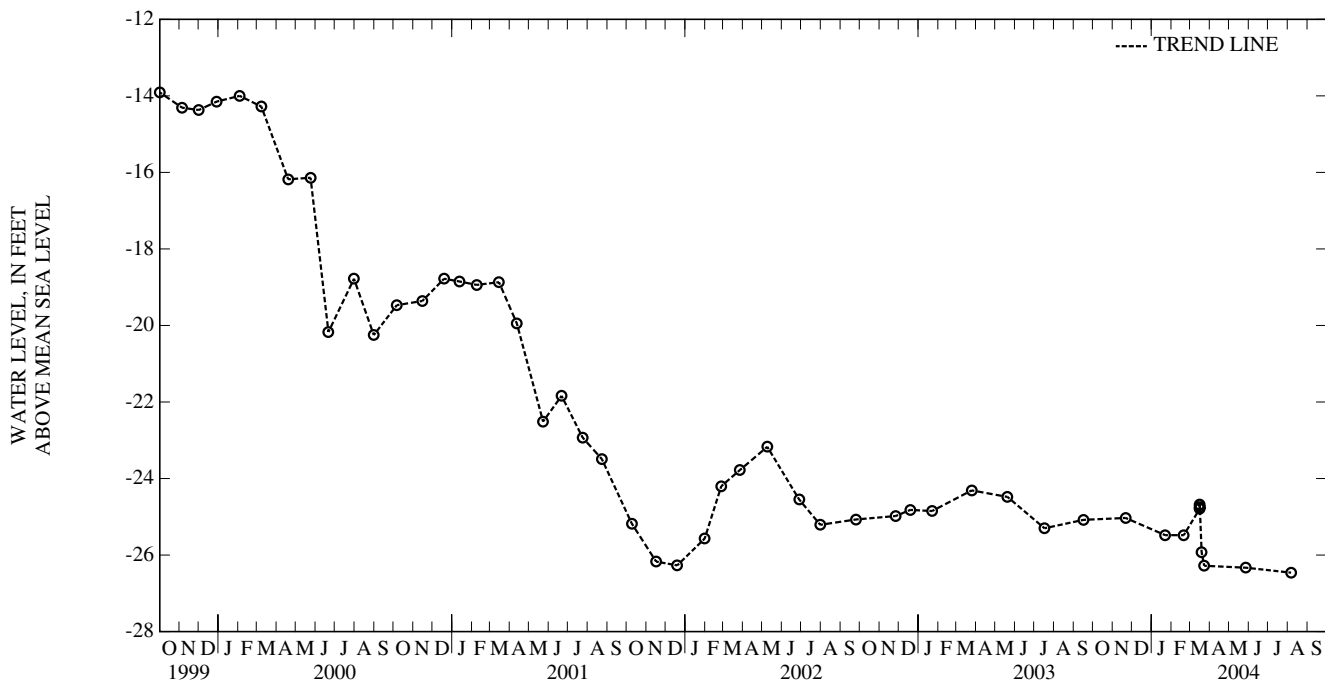
PERIOD OF RECORD.--August 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.76 ft above sea level, August 29, 1995 (recorder); lowest measured, 27.16 ft below sea level, January 2, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-25.03	MAR 16, 2004	-24.79	MAR 19, 2004	-25.93	AUG 06, 2004	-26.46
JAN 22, 2004	-25.48	16	-24.75	23	-26.28		
FEB 20	-25.48	16	-24.68	MAY 27	-26.33		

LOWEST -26.46 AUG 06, 2004
HIGHEST -24.68 MAR 16, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bc 81. SITE ID.--383709077061002. PERMIT NUMBER.--CH-88-0482.

LOCATION.--Lat 38°37'09", long 77°06'10", Hydrologic Unit 02070010, 1.7 mi southwest of intersection with MD Rts. 210 and 227, on northwest side of Chapmans Landing Rd. Owner: Montrose Farms.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 656 ft; casing diameter 6 in., to 541 ft, casing diameter 4 in., from 531 to 556 ft, 588 to 642 ft, and 646 to 656 ft; screen diameter 4 in., from 556 to 588 ft, and 642 to 646 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 156.46 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 2.07 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

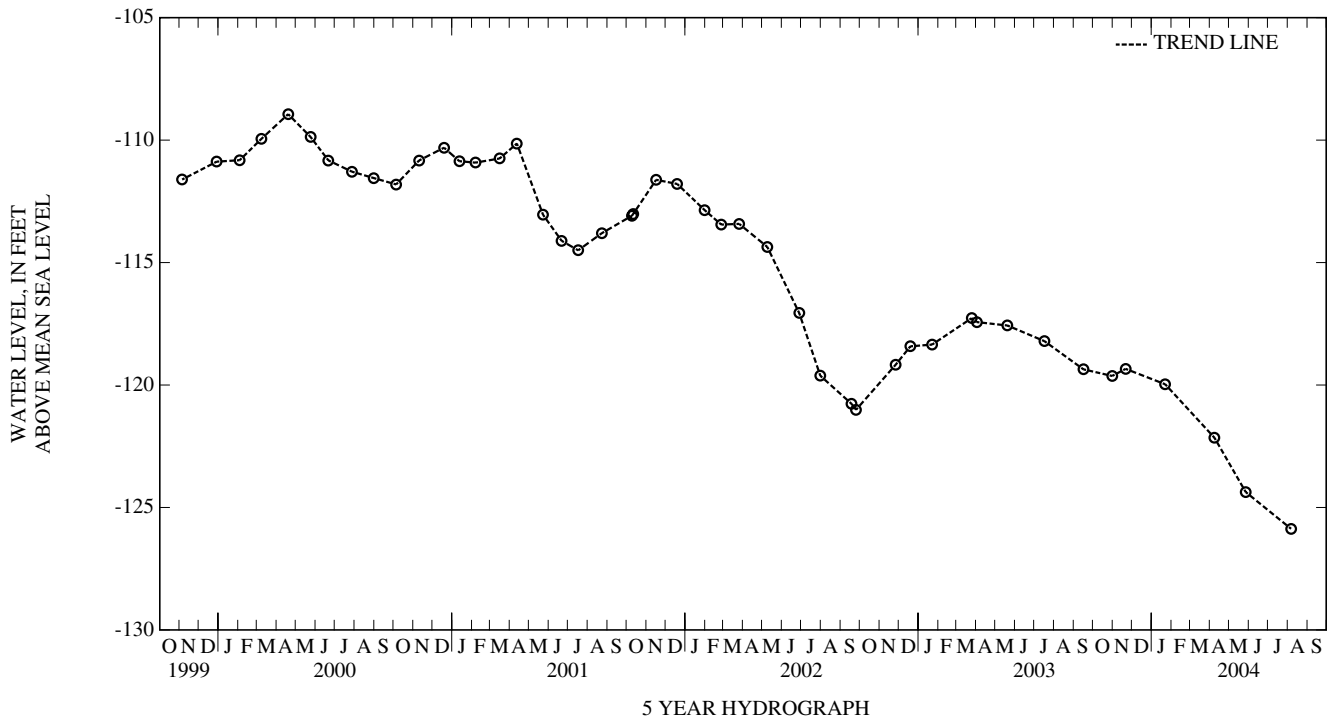
PERIOD OF RECORD.--August 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 97.97 ft below sea level, July 3 and 4, 1997 (recorder); lowest measured, 125.87 ft below sea level, August 6, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	-119.63	JAN 22, 2004	-119.97	MAY 27, 2004	-124.37
NOV 21	-119.34	APR 08	-122.15	AUG 06	-125.87

LOWEST -125.87 AUG 06, 2004
 HIGHEST -119.34 NOV 21, 2003



5 YEAR HYDROGRAPH
 OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bd 52. SITE ID.--383553077032401. PERMIT NUMBER.--CH-94-0899.

LOCATION.--Lat 38°35'53", long 77°03'24", Hydrologic Unit 02070011, 2.5 mi southeast of Pomonkey, on east side of MD Rt. 227. Owner: Maryland Geological Survey.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,105 ft; casing diameter 4 in., to 1,040 ft, 1,050 to 1,085 ft, and 1,095 to 1,105 ft; screen diameter 4 in., from 1,040 to 1,050 ft, and 1,085 to 1,095 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 47.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 3.00 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

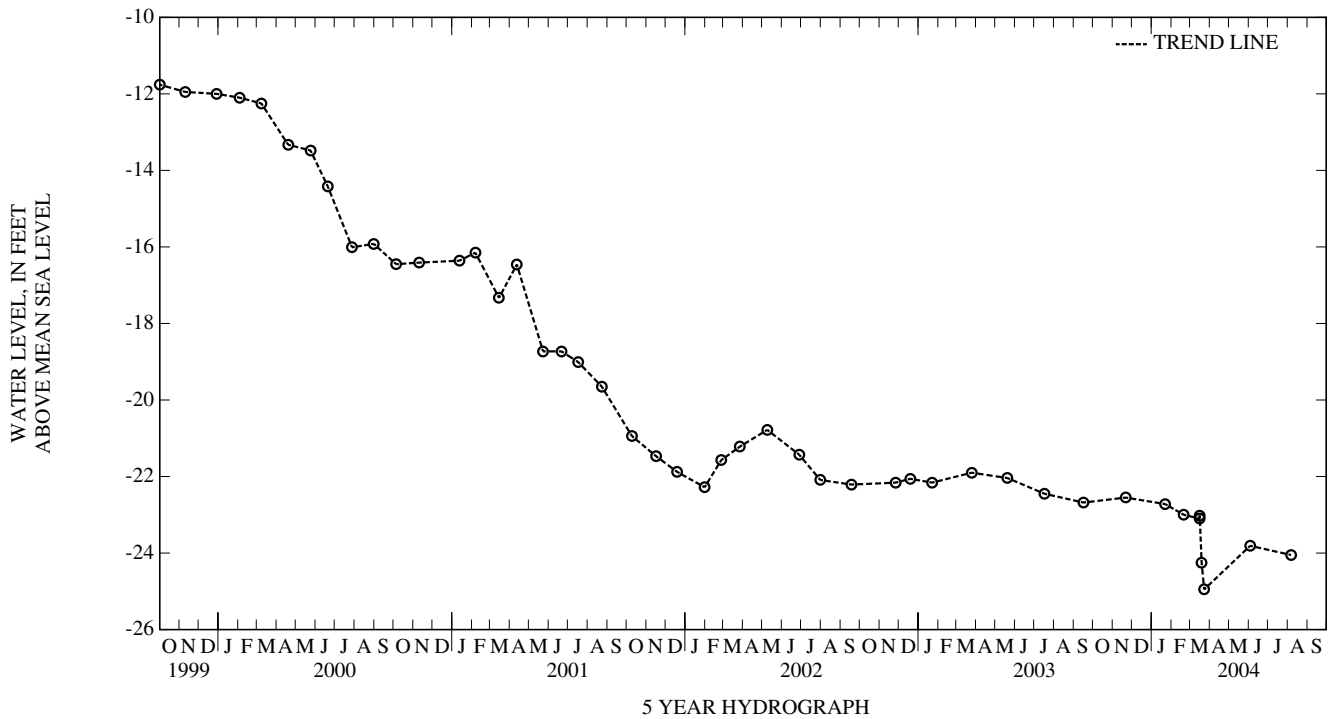
PERIOD OF RECORD.--October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.95 ft above sea level, November 20, 1996; lowest measured, 22.68 ft below sea level, September 16, 2003.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-22.55	MAR 16, 2004	-23.10	MAR 23, 2004	-24.95
JAN 22, 2004	-22.72	16	-23.02	JUN 03	-23.81
FEB 20	-23.00	19	-24.25	AUG 06	-24.05

LOWEST -24.95 MAR 23, 2004
 HIGHEST -22.55 NOV 21, 2003



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Be 43. SITE ID.--38381907655501. PERMIT NUMBER.--CH-71-0066.

LOCATION.--Lat 38°38'19", long 76°55'55", Hydrologic Unit 02070011, at northeast end of Joy Lane, 0.2 mi east of Sun Valley Drive, Waldorf. Owner: Private Residence.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 459 ft; casing diameter 6 in., to 428 ft; screen diameter 5 in., from 433 to 459 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with graphic water-level recorder from February 1977 to January 1978.

DATUM.--Elevation of land surface is 216.79 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land surface.

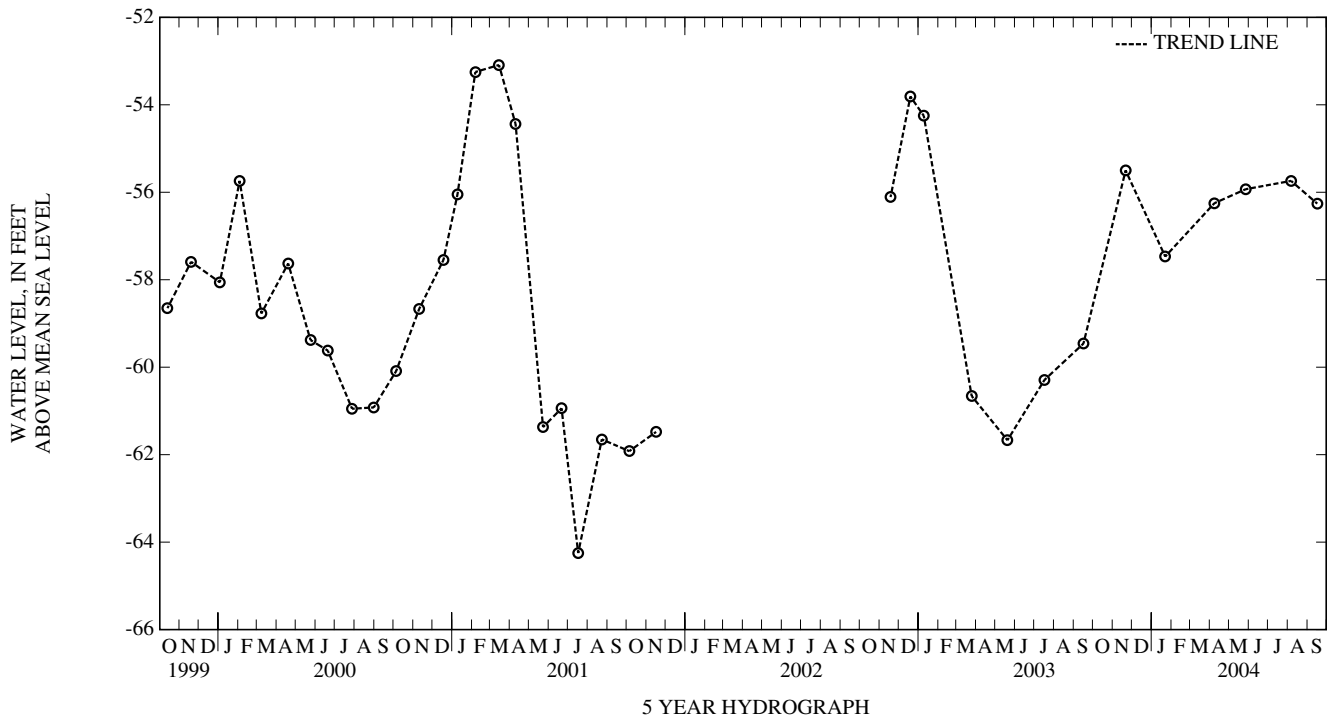
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. Water levels were discontinued from December 2001 to November 2002, when another means of access to the well was established.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.99 ft above sea level, July 14, 1975; lowest measured, 66.69 ft below sea level, July 22-24, 1999 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-55.50	APR 08, 2004	-56.25	AUG 06, 2004	-55.74
JAN 22, 2004	-57.47	MAY 27	-55.93	SEP 16	-56.26
LOWEST -57.47 JAN 22, 2004					
HIGHEST -55.50 NOV 21, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Be 57. SITE ID.--383706076575601. PERMIT NUMBER.--CH-81-1194.

LOCATION.--Lat 38°37'06", long 76°57'56", Hydrologic Unit 02070011, St. John's pumping station, St. Charles. Owner: Charles County Department of Public Works.

AQUIFER.--Patuxant Formation of Lower Cretaceous age. Aquifer code: 217PTXNU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,696 ft; casing diameter 6 in., to 400 ft; casing diameter 4 in., from 400 to 1,660 ft, screen diameter 4 in., from 1,660 to 1,696 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 212.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 2.00 ft above land surface.

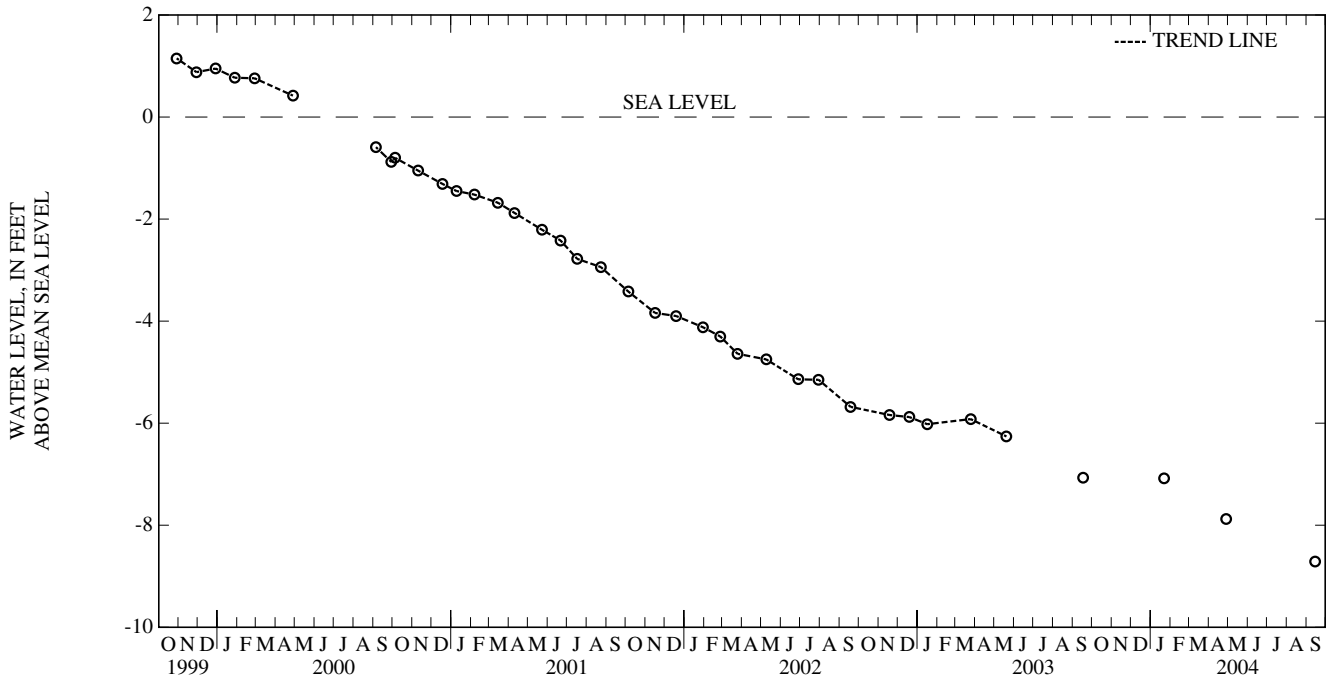
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.16 ft above sea level, April 3, 1986; lowest measured, 8.71 ft below sea level, September 14, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 2004	-7.08	APR 28, 2004	-7.88	SEP 14, 2004	-8.71
LOWEST -8.71 SEP 14, 2004					
HIGHEST -7.08 JAN 22, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Be 60. SITE ID.--383706076575604. PERMIT NUMBER.--CH-81-1468.

LOCATION.--Lat 38°37'06", long 76°57'56", Hydrologic Unit 02070011, St. John's pumping station, St. Charles. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 625 ft; casing diameter 6 in., to 401 ft; casing diameter 4 in., from 401 ft to 610 ft, and 625 to 635 ft; screen diameter 4 in., from 610 to 625 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 212.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 2.20 ft above land surface.

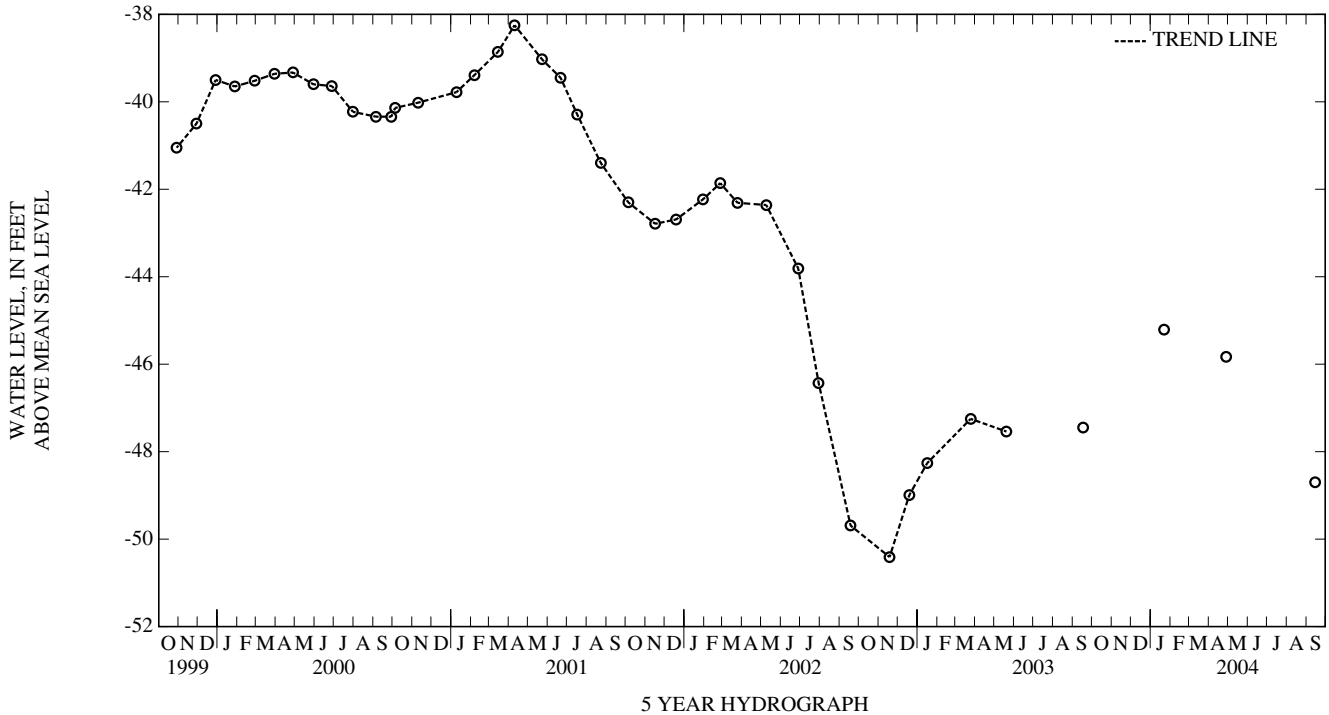
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.30 ft below sea level, April 10, 1987; lowest measured, 50.41 ft below sea level, November 18, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 2004	-45.21	APR 28, 2004	-45.83	SEP 14, 2004	-48.70
LOWEST -48.70		SEP 14, 2004			
HIGHEST -45.21		JAN 22, 2004			



CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 133. SITE ID.--383640076545901. PERMIT NUMBER.--CH-70-0069.

LOCATION.--Lat 38°36'40", long 76°54'59", Hydrologic Unit 02070011, at St. Charles, Copely Rd. pumping station. Owner: Charles County Department of Public Works.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 510 ft; casing diameter 10 in., to 77 ft; casing diameter 6 in., from -2 to 420 ft, casing diameter 4 in., from 420 to 436 ft, and 506 to 510 ft; screen diameter 4 in., from 436 to 506 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel from April 1992 to current year. Twice yearly measurements from April 1974 to April 1992.

DATUM.--Elevation of land surface is 223.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.82 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

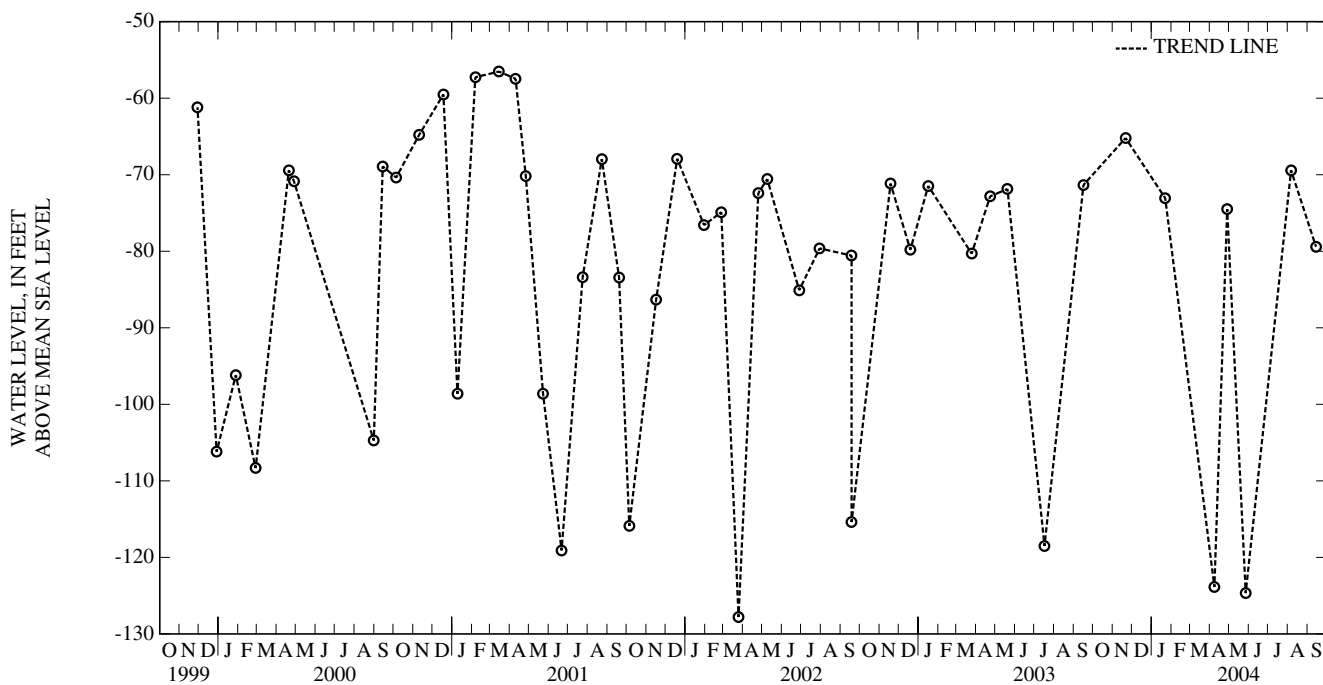
PERIOD OF RECORD.--April 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.82 ft above sea level, April 26, 1974; lowest measured, 127.79 ft below sea level, March 25, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-65.20	APR 08, 2004	-123.86	MAY 27, 2004	-124.67	SEP 14, 2004	-79.40
JAN 22, 2004	-73.07	28	-74.49	AUG 06	-69.43		

LOWEST -124.67 MAY 27, 2004
HIGHEST -65.20 NOV 21, 2003



CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 134. SITE ID.--383728076531701. PERMIT NUMBER.--CH-70-0067.

LOCATION.--Lat 38°37'28", long 76°53'17", Hydrologic Unit 02070011, at John Hansen Middle School parking lot, at Waldorf. Owner: Charles County Department of Public Works.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 546 ft; casing diameter 6 in., to 402 ft; casing diameter 4 in., from 422 to 485 ft; screen diameter 4 in., from 402 to 422 ft, and 485 to 546 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 202.09 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.52 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

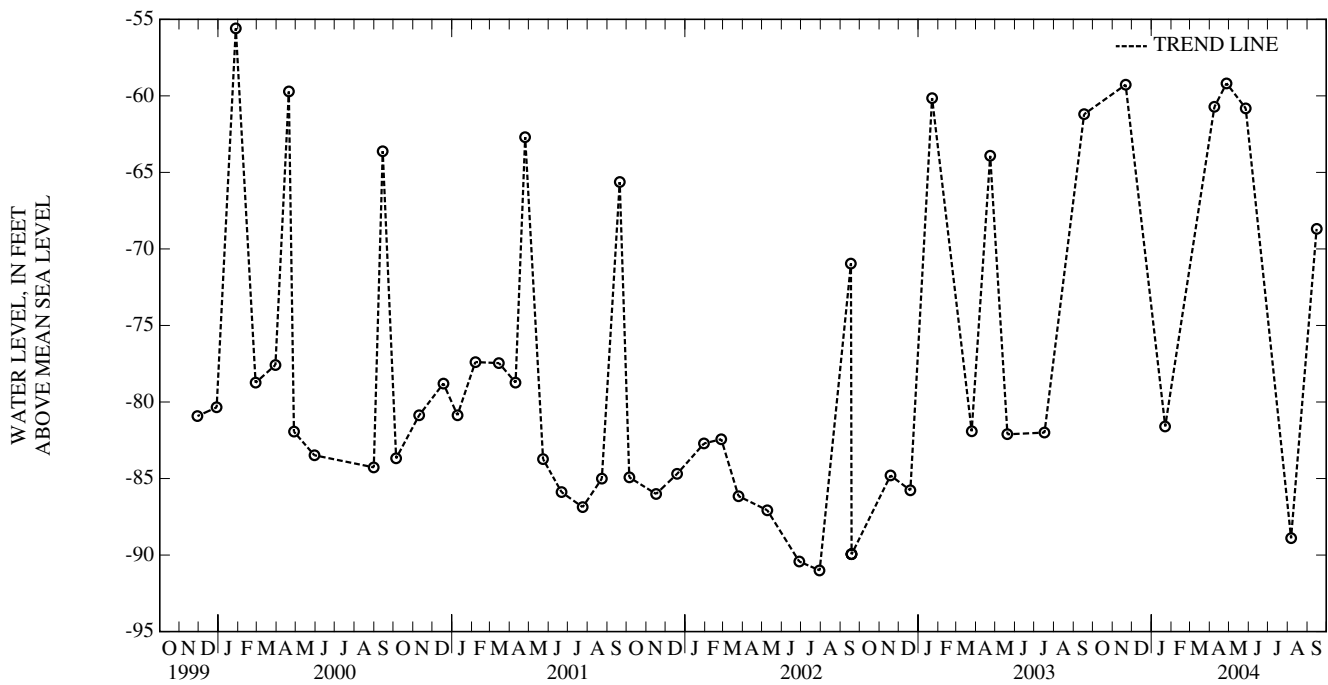
PERIOD OF RECORD.--April 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.22 ft above sea level, April 26, 1974; lowest measured, 91.00 ft below sea level, July 30, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-59.27	APR 08, 2004	-60.72	MAY 27, 2004	-60.81	SEP 15, 2004	-68.69
JAN 22, 2004	-81.59	APR 27	-59.18	AUG 06	-88.90		

LOWEST -88.90 AUG 06, 2004
 HIGHEST -59.18 APR 27, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 146. SITE ID.--383508076540701. PERMIT NUMBER.--CH-81-0593.

LOCATION.--Lat 38°35'08", long 76°54'07", Hydrologic Unit 02070011, 0.3 mi south of the intersection of St. Pauls Dr. and Piney Church Rd., St. Charles.
Owner: Charles County Department of Public Works.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,427 ft; casing diameter 6 in., to 1,059 ft, 1,069 to 1,073 ft, 1,083 to 1,161 ft, 1,166 to 1,170 ft, 1,180 to 1,184 ft, 1,189 to 1,195 ft, 1,205 to 1,244 ft, 1,249 to 1,252 ft, 1,262 to 1,298 ft, 1,328 to 1,342 ft, and 1,417 to 1,427 ft; screen diameter 10 in. from 1,059 to 1,069 ft, 1,073 to 1,083 ft, 1,161 to 1,166 ft, 1,170 to 1,180 ft, 1,184 to 1,189 ft, 1,195 to 1,205 ft, 1,244 to 1,249 ft, 1,252 to 1,262 ft, 1,298 to 1,328 ft, and 1,342 to 1,417 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 192.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

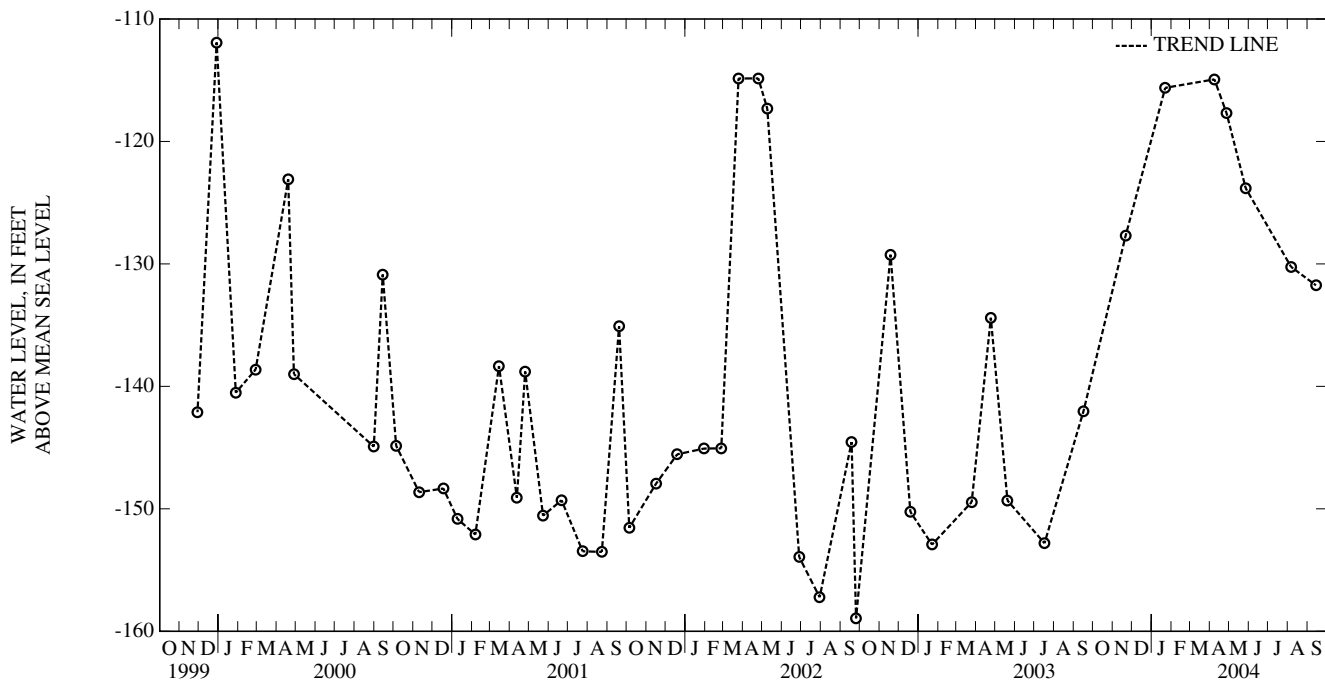
PERIOD OF RECORD.--April 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.02 ft below sea level, April 4, 1985; lowest measured, 158.94 ft below sea level, September 25, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-127.70	APR 08, 2004	-114.93	MAY 27, 2004	-123.82	SEP 14, 2004	-131.75
JAN 22, 2004	-115.62	27	-117.69	AUG 06	-130.24		

LOWEST -131.75 SEP 14, 2004
HIGHEST -114.93 APR 08, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 151. SITE ID.--383508076540703. PERMIT NUMBER.--CH-81-1265.

LOCATION.--Lat 38°35'08", long 76°54'07", Hydrologic Unit 02070011, 0.3 mi south of the intersection of St. Pauls Dr. and Piney Church Rd., St. Charles. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 660 ft; casing diameter 6 in., to 399 ft; casing diameter 4 in., from 399 to 645 ft; screen diameter 4 in., from 645 to 660 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from August 1987 to current year.

DATUM.--Elevation of land surface is 192.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.20 ft above land surface.

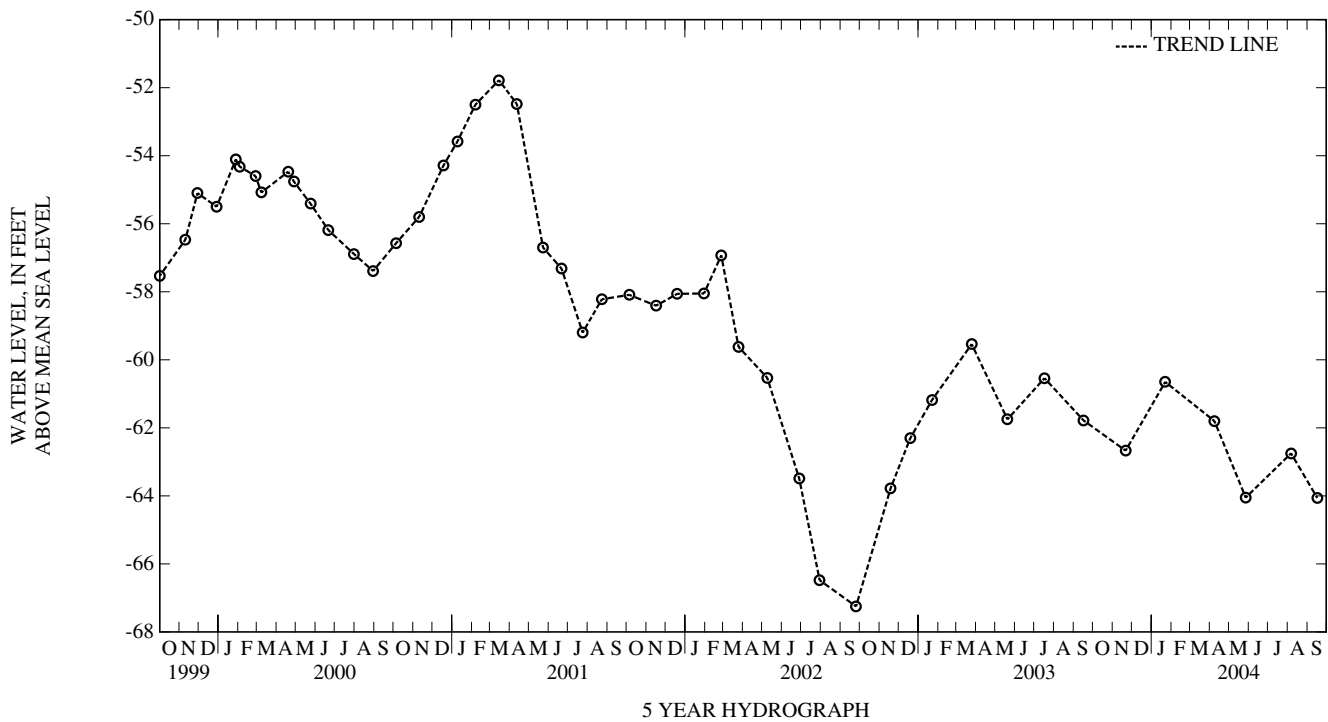
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--November 1985 to December 1986, and April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.39 ft below sea level, March 27, 1988 (recorder); lowest measured, 69.64 ft below sea level, August 21, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-62.67	APR 08, 2004	-61.80	AUG 06, 2004	-62.75
JAN 22, 2004	-60.65	MAY 27	-64.05	SEP 16	-64.06
LOWEST -64.06 SEP 16, 2004					
HIGHEST -60.65 JAN 22, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 157. SITE ID.--383637076545803. PERMIT NUMBER.--CH-81-1846.

LOCATION.--Lat 38°36'40", long 76°54'59", Hydrologic Unit 02070011, at St. Charles, Copely Rd. pumping station. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 623 ft; casing diameter 6 in., to 396 ft; casing diameter 4 in., from 396 to 608 ft; screen diameter 4 in., from 608 to 623 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 225.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.70 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

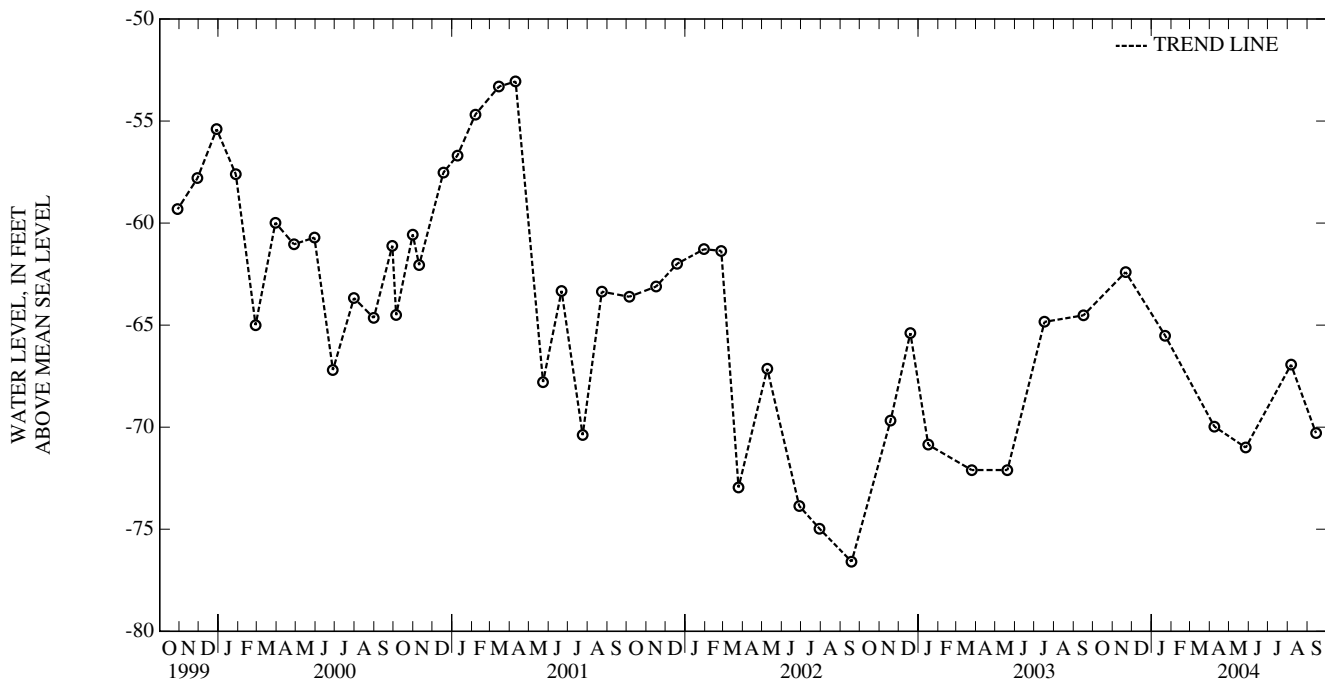
PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.27 ft below sea level, April 5, 1988; lowest measured, 76.59 ft below sea level, September 18, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-62.40	APR 08, 2004	-69.97	AUG 06, 2004	-66.94
JAN 22, 2004	-65.52	MAY 27	-71.00	SEP 14	-70.29

LOWEST -71.00 MAY 27, 2004
HIGHEST -62.40 NOV 21, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 158. SITE ID.--383732076531902. PERMIT NUMBER.--CH-81-1847.

LOCATION.--Lat 38°37'32", long 76°53'19", Hydrologic Unit 02070011, at John Hansen Middle School pumping station, Waldorf. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 645 ft; casing diameter 6 in., to 398 ft; casing diameter 4 in., from 398 to 630 ft; screen diameter 4 in., from 630 to 645 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 193 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

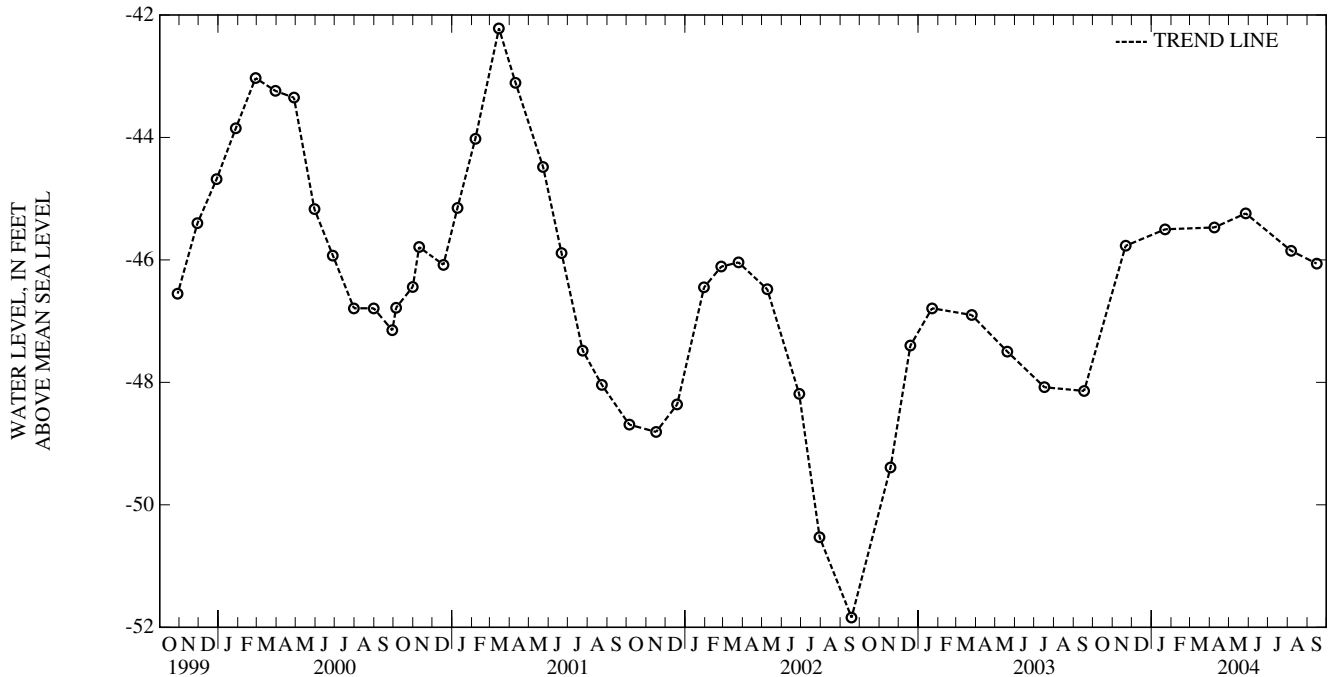
PERIOD OF RECORD.--April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.70 ft below sea level, April 10, 1987; lowest measured, 51.84 ft below sea level, September 18, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-45.77	APR 08, 2004	-45.47	AUG 06, 2004	-45.85
JAN 22, 2004	-45.50	MAY 27	-45.24	SEP 15	-46.06

LOWEST -46.06 SEP 15, 2004
 HIGHEST -45.24 MAY 27, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bg 12. SITE ID.--383746076482901. PERMIT NUMBER.--CH-81-0600.

LOCATION.--Lat 38°37'46", long 76°48'29", Hydrologic Unit 02070011, Cedarville State Forest, near Forest Rd. Owner: U.S. Geological Survey.

AQUIFER.--Calvert Formation of Lower middle Miocene age. Aquifer code: 122CLVR.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 24.5 ft; casing diameter 4 in., to 13.5 ft; casing diameter 2 in., from 18.5 to 24.5 ft; screen diameter 2 in., from 13.5 to 18.5 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 149.69 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by natural climatic response. The high water levels from December 1999 through May 2001 is the result of beavers damming nearby Zekiah Swamp Run.

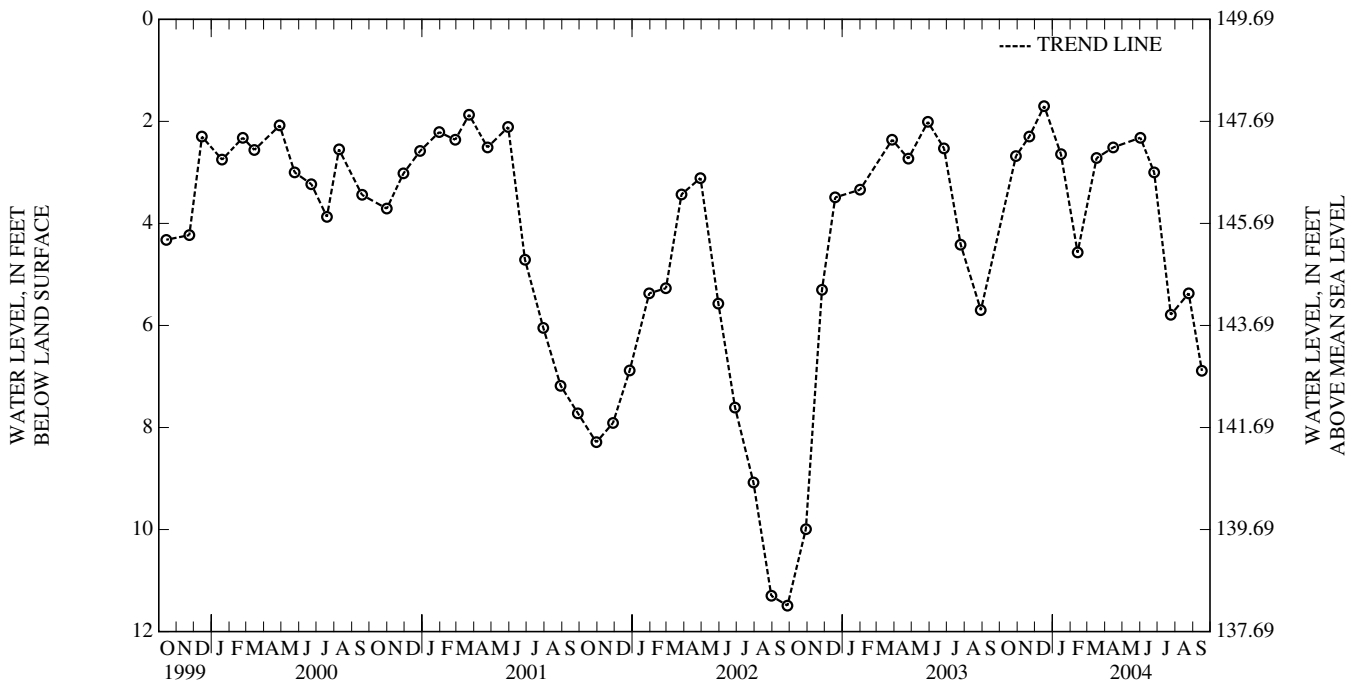
PERIOD OF RECORD.--August 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.70 ft below land surface, December 17, 2003; lowest measured, 11.49 ft below land surface, September 27, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	2.68	JAN 15, 2004	2.64	APR 15, 2004	2.51	JUL 24, 2004	5.79
NOV 21	2.30	FEB 13	4.57	JUN 01	2.32	AUG 24	5.37
DEC 17	1.70	MAR 17	2.72	25	3.00	SEP 16	6.89

HIGHEST 1.70 DEC 17, 2003
 LOWEST 6.89 SEP 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bg 17. SITE ID.--383706076475401. PERMIT NUMBER.--CH-94-5325.

LOCATION.--Lat 38°37'06", long 76°47'54", Hydrologic Unit 02070011. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco Aquifer Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 1,353 ft; casing diameter 4 in., to 1,299 ft, from 1,314 to 1,328 ft, and from 1,343 to 1,353 ft; screen diameter 4 in., from 1,299 to 1,314 ft, and from 1,328 to 1,343 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, April 2003 to current year.

DATUM.--Elevation of land surface is 199.16 ft above North American Vertical Datum of 1988. Measuring point: Top of shelter platform, 3.50 ft above land surface.

REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels affected by nearby pumping.

PERIOD OF RECORD.--April 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.59 ft below sea level, April 4, 2003; lowest measured, 52.98 ft below sea level, September 24, 2004 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

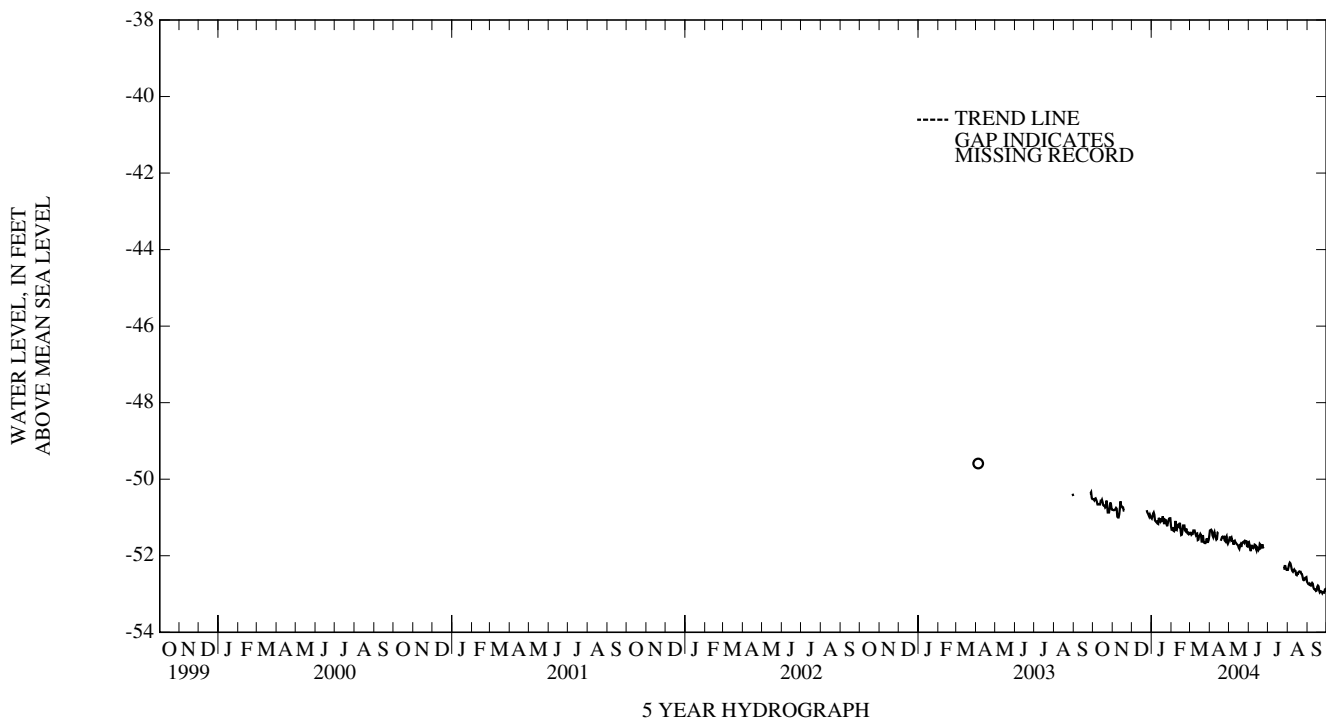
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2003	-50.49	DEC 16, 2003	-50.85	FEB 12, 2004	-51.19	JUN 01, 2004	-51.63
29	-50.52	23	-50.79	MAR 17	-51.33	25	-51.85
NOV 21	-50.68	JAN 15, 2004	-50.94	APR 15	-51.46		
	LOWEST -51.85	JUN 25, 2004					
	HIGHEST -50.49	OCT 22, 2003					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-50.52	-50.52	-50.79	-50.80	---	---	-50.92	-51.03	-51.22	-51.32	-51.34	-51.40
2	-50.52	-50.52	-50.79	-50.81	---	---	-50.88	-50.97	-51.26	-51.32	-51.27	-51.40
3	-50.51	-50.55	-50.80	-50.81	---	---	-50.82	-50.90	-50.98	-51.26	-51.39	-51.45
4	-50.44	-50.51	-50.77	-50.80	---	---	-50.79	-50.87	-51.13	-51.35	-51.33	-51.43
5	-50.44	-50.50	-50.75	-50.78	---	---	-50.76	-50.93	-51.29	-51.36	-51.21	-51.43
6	-50.50	-50.54	-50.68	-50.75	---	---	-50.92	-51.08	-50.88	-51.31	-51.13	-51.34
7	-50.54	-50.59	-50.69	-50.77	---	---	-51.02	-51.10	-50.85	-51.09	-51.16	-51.34
8	-50.59	-50.66	-50.77	-50.98	---	---	-51.01	-51.12	-51.09	-51.32	-51.19	-51.34
9	-50.66	-50.66	-50.98	-51.00	---	---	-51.00	-51.11	-51.16	-51.33	-51.32	-51.41
10	-50.66	-50.66	-50.92	-51.00	---	---	-51.10	-51.16	-51.05	-51.17	-51.41	-51.46
11	-50.66	-50.66	-50.76	-50.92	---	---	-51.00	-51.17	-51.09	-51.22	-51.27	-51.43
12	-50.56	-50.66	-50.56	-50.76	---	---	-50.93	-51.01	-51.16	-51.24	-51.26	-51.42
13	-50.56	-50.57	-50.55	-50.58	---	---	-50.92	-51.05	-51.14	-51.18	-51.42	-51.59
14	-50.40	-50.58	-50.58	-50.70	---	---	-50.83	-51.09	-51.09	-51.14	-51.43	-51.58
15	-50.36	-50.54	-50.70	-50.71	---	---	-50.82	-51.02	-51.11	-51.32	-51.41	-51.49
16	-50.54	-50.60	-50.71	-50.74	---	---	-51.01	-51.10	-51.29	-51.46	-51.24	-51.47
17	-50.60	-50.68	-50.74	-50.74	---	---	-50.97	-51.09	-51.33	-51.45	-51.29	-51.43
18	-50.68	-50.69	-50.74	-50.82	---	---	-50.67	-50.97	-51.18	-51.34	-51.39	-51.46
19	-50.69	-50.69	-50.69	-50.82	---	---	-50.87	-51.03	-51.12	-51.21	-51.34	-51.63
20	-50.69	-50.74	---	---	---	---	-50.99	-51.15	-50.99	-51.21	-51.29	-51.63
21	-50.51	-50.72	---	---	---	---	-51.03	-51.15	-50.98	-51.21	-51.26	-51.46
22	-50.49	-50.56	---	---	---	---	-50.86	-51.06	-51.21	-51.34	-51.45	-51.61
23	-50.56	-50.67	---	---	---	---	-51.00	-51.07	-51.28	-51.36	-51.58	-51.66
24	-50.67	-50.87	---	---	-50.61	-50.81	-50.95	-51.17	-51.22	-51.29	-51.62	-51.67
25	-50.87	-50.87	---	---	-50.75	-50.87	-51.15	-51.23	-51.28	-51.37	-51.63	-51.67
26	-50.76	-50.87	---	---	-50.84	-50.90	-51.07	-51.16	-51.36	-51.41	-51.55	-51.63
27	-50.59	-50.76	---	---	-50.87	-50.94	-50.87	-51.08	-51.35	-51.40	-51.51	-51.55
28	-50.59	-50.61	---	---	-50.91	-50.98	-50.90	-51.03	-51.39	-51.44	-51.53	-51.64
29	-50.39	-50.65	---	---	-50.77	-50.93	-50.98	-51.02	-51.38	-51.43	-51.59	-51.64
30	-50.65	-50.77	---	---	-50.73	-50.98	-50.92	-51.02	---	---	-51.48	-51.59
31	-50.77	-50.80	---	---	-50.91	-51.01	-51.01	-51.22	---	---	-51.34	-51.48
MONTH	-50.36	-50.87	-50.55	-51.00	-50.61	-51.01	-50.67	-51.23	-50.85	-51.46	-51.13	-51.67

CHARLES COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-51.17	-51.34	-51.52	-51.59	-51.53	-51.64	---	---	-52.27	-52.37	-52.65	-52.71
2	-51.21	-51.33	-51.39	-51.52	-51.63	-51.72	---	---	-52.21	-52.30	-52.70	-52.74
3	-51.25	-51.32	-51.42	-51.52	-51.70	-51.82	---	---	-52.14	-52.22	-52.69	-52.75
4	-51.18	-51.35	-51.49	-51.58	-51.74	-51.88	---	---	-52.14	-52.18	-52.70	-52.73
5	-51.34	-51.47	-51.45	-51.54	-51.63	-51.74	---	---	-52.15	-52.20	-52.73	-52.77
6	-51.39	-51.51	-51.52	-51.61	-51.66	-51.74	---	---	-52.20	-52.27	-52.71	-52.78
7	-51.32	-51.42	-51.54	-51.62	-51.72	-51.78	---	---	-52.27	-52.35	-52.67	-52.74
8	-51.32	-51.38	-51.58	-51.71	-51.76	-51.80	---	---	-52.35	-52.40	-52.60	-52.71
9	-51.34	-51.48	-51.57	-51.63	-51.70	-51.78	---	---	-52.37	-52.42	-52.58	-52.73
10	-51.47	-51.53	-51.57	-51.61	-51.67	-51.71	---	---	-52.31	-52.39	-52.73	-52.83
11	-51.48	-51.58	-51.59	-51.65	-51.66	-51.72	---	---	-52.31	-52.36	-52.79	-52.87
12	-51.39	-51.56	-51.63	-51.67	-51.69	-51.81	---	---	-52.29	-52.39	-52.80	-52.88
13	-51.21	-51.39	-51.65	-51.70	-51.76	-51.86	---	---	-52.28	-52.40	-52.81	-52.88
14	-51.23	-51.38	-51.65	-51.71	-51.70	-51.78	---	---	-52.39	-52.50	-52.84	-52.92
15	---	---	-51.65	-51.73	-51.73	-51.80	---	---	-52.43	-52.51	-52.78	-52.91
16	---	---	-51.70	-51.79	-51.78	-51.85	---	---	-52.42	-52.47	-52.73	-52.81
17	---	---	-51.70	-51.82	-51.63	-51.82	---	---	-52.39	-52.47	-52.57	-52.78
18	-51.52	-51.61	-51.63	-51.73	-51.62	-51.69	---	---	-52.34	-52.42	-52.55	-52.80
19	-51.41	-51.56	-51.63	-51.70	-51.63	-51.71	---	---	-52.35	-52.41	-52.80	-52.91
20	-51.44	-51.51	-51.69	-51.77	-51.71	-51.79	---	---	-52.36	-52.42	-52.90	-52.96
21	-51.42	-51.50	-51.62	-51.70	-51.70	-51.77	---	---	-52.33	-52.42	-52.87	-52.94
22	-51.45	-51.52	-51.60	-51.66	-51.68	-51.70	---	---	-52.42	-52.47	-52.86	-52.93
23	-51.47	-51.51	-51.59	-51.64	-51.69	-51.78	---	---	-52.43	-52.48	-52.87	-52.94
24	-51.51	-51.60	-51.59	-51.63	-51.75	-51.81	---	---	-52.47	-52.55	-52.91	-52.98
25	-51.52	-51.62	-51.61	-51.66	---	---	-52.30	-52.34	-52.55	-52.63	-52.88	-52.95
26	-51.42	-51.52	-51.58	-51.61	---	---	-52.25	-52.34	-52.56	-52.64	-52.87	-52.95
27	-51.35	-51.49	-51.57	-51.62	---	---	-52.19	-52.27	-52.53	-52.63	-52.87	-52.96
28	-51.49	-51.65	-51.50	-51.62	---	---	-52.20	-52.27	-52.48	-52.58	-52.61	-52.88
29	-51.63	-51.69	-51.62	-51.75	---	---	-52.25	-52.34	-52.49	-52.57	-52.70	-52.87
30	-51.56	-51.65	-51.65	-51.76	---	---	-52.28	-52.37	-52.47	-52.56	-52.84	-52.93
31	---	---	-51.52	-51.65	---	---	-52.29	-52.37	-52.52	-52.68	---	---
MONTH	-51.17	-51.69	-51.39	-51.82	-51.53	-51.88	-52.19	-52.37	-52.14	-52.68	-52.55	-52.98
YEAR	-50.36	-52.98										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Cb 7. SITE ID.--383422077114601. PERMIT NUMBER.--CH-01-1908.

LOCATION.--Lat 38°34'22", long 77°11'46", Hydrologic Unit 02070011, at Caffee and Greenslade Rds., U.S. Naval Ordnance Station, about 2.5 mi southwest of Indian Head. Owner: U.S. Navy.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 167 ft; casing diameter 8 in., to 144 ft; screen diameter 6 in., from 144 to 167 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder September 1953 to July 1965.

DATUM.--Elevation of land surface is 36.0 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.08 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

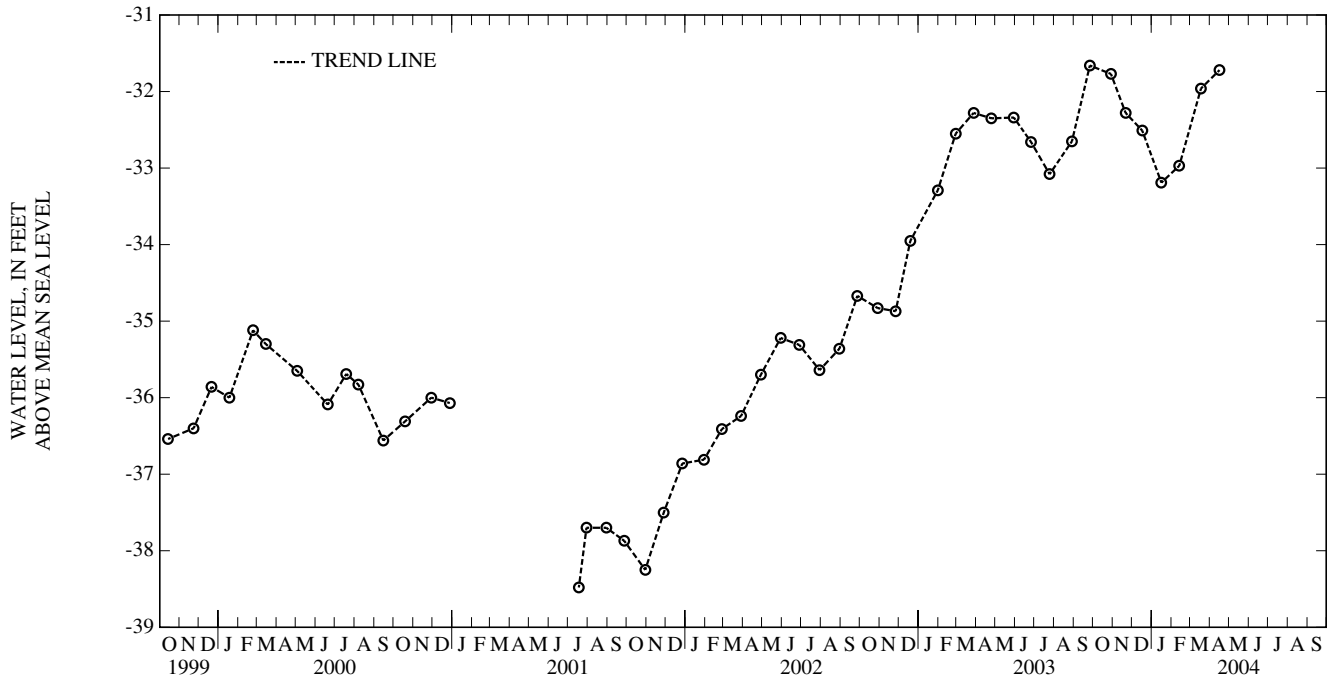
PERIOD OF RECORD.--March and April 1952, August 1953 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.35 ft below sea level, April 18, 1952; lowest measured, 53.33 ft below sea level, August 12, 14, 1989 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	-31.77	DEC 17, 2003	-32.51	FEB 13, 2004	-32.97	APR 16, 2004	-31.72
NOV 21	-32.28	JAN 16, 2004	-33.19	MAR 18	-31.96		

LOWEST -33.19 JAN 16, 2004
 HIGHEST -31.72 APR 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Cc 31. SITE ID.--383455077074401. PERMIT NUMBER.--CH-73-1416.

LOCATION.--Lat 38°34'55", long 77°07'44", Hydrologic Unit 02070011, at Mattawoman Natural Environment Area, approximately 2,000 ft west of the intersection of MD Rts. 224 and 425. Owner: Maryland Department of Natural Resources.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 559 ft; casing diameter 6 in., to 200 ft; casing diameter 4 in., from 200 to 438 ft., 453 to 480 ft, 505 to 540 ft, and 554 to 559 ft; screen diameter 4 in., from 438 to 453 ft, 480 to 505 ft, and 540 to 554 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 35.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 3.75 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--July 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 84.23 ft below sea level, July 14, 1998; lowest measured, 98.87 ft below sea level, August 9, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

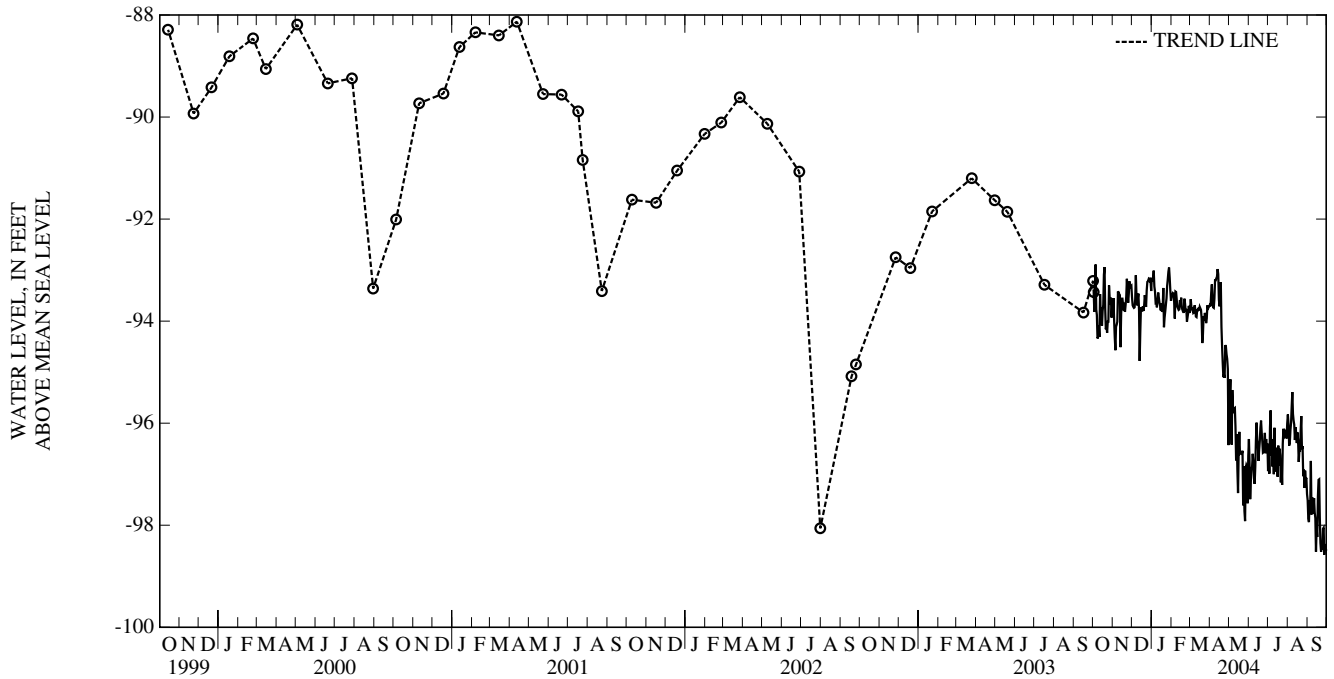
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-93.55	APR 08, 2004	-93.63	AUG 06, 2004	-95.88
JAN 22, 2004	-93.53	MAY 27	-96.75	SEP 16	-97.83
LOWEST -97.83		SEP 16, 2004			
HIGHEST -93.53		JAN 22, 2004			

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-92.96	-93.21	-93.43	-93.89	-93.04	-93.53	-93.10	-93.15	-93.19	-93.52	-93.48	-93.75
2	-92.87	-93.43	-93.30	-93.55	-93.27	-93.69	-93.03	-93.22	-93.17	-93.50	-93.41	-93.57
3	-92.95	-93.82	-93.20	-93.98	-93.40	-93.72	-92.95	-93.16	-93.02	-93.45	-93.40	-93.74
4	-92.89	-93.36	-93.35	-94.32	-93.33	-93.74	-92.91	-93.01	-93.04	-93.46	-93.38	-93.77
5	-92.78	-92.89	-93.50	-94.57	-93.19	-93.73	-92.89	-93.32	-93.24	-93.63	-93.41	-93.73
6	-92.74	-93.77	-93.54	-94.11	-93.01	-93.57	-93.09	-93.42	-93.14	-93.95	-93.19	-93.84
7	-93.05	-93.88	-93.43	-94.07	-92.96	-93.10	-93.17	-93.64	-93.13	-93.42	-93.22	-93.83
8	-93.37	-94.34	-93.35	-94.01	-93.03	-93.52	-93.29	-93.63	-93.23	-93.43	-93.20	-93.69
9	-93.46	-94.31	-93.18	-93.42	-93.20	-93.69	-93.25	-93.73	-93.21	-93.58	-93.35	-93.76
10	-93.53	-94.08	-93.08	-93.53	-93.18	-93.56	-93.33	-93.57	-93.24	-93.72	-93.47	-93.91
11	-93.36	-94.31	-93.06	-93.47	-92.97	-93.46	-93.22	-93.44	-93.37	-93.75	-93.48	-93.92
12	-93.01	-93.47	-92.95	-93.50	-93.24	-93.80	-93.16	-93.54	-93.48	-93.78	-93.39	-93.79
13	-92.99	-93.84	-93.36	-94.51	-93.49	-94.78	-93.23	-93.64	-93.45	-93.77	-93.44	-93.79
14	-93.19	-93.74	-93.47	-93.86	-93.26	-94.20	-93.33	-93.70	-93.28	-93.59	-93.35	-93.74
15	-93.05	-94.09	-93.20	-93.56	-93.21	-93.73	-93.31	-93.79	-93.25	-93.69	-93.30	-93.79
16	-93.43	-93.80	-93.14	-93.56	-93.46	-93.77	-93.38	-93.65	-93.37	-93.54	-93.41	-93.72
17	-93.09	-93.68	-93.10	-93.68	-93.25	-93.81	-93.57	-93.82	-93.32	-93.74	-93.35	-93.75
18	-92.91	-93.09	-93.30	-93.79	-93.40	-93.71	-93.29	-93.74	-93.42	-93.78	-93.37	-93.78
19	-92.82	-92.94	-93.26	-93.64	-93.38	-93.80	-93.22	-93.35	-93.42	-93.77	-93.32	-93.95
20	-92.83	-93.75	-93.22	-93.82	-93.44	-93.70	-93.19	-94.12	-93.46	-93.84	-93.31	-94.43
21	-93.02	-94.16	-93.30	-93.68	-93.30	-93.49	-93.52	-93.93	-93.31	-93.56	-93.50	-94.27
22	-93.28	-94.09	-93.08	-93.52	-93.25	-93.60	-93.43	-93.81	-93.26	-93.65	-93.45	-93.91
23	-93.29	-94.23	-93.01	-93.17	-93.30	-93.72	-93.28	-93.68	-93.43	-93.81	-93.56	-93.99
24	-93.55	-94.01	-92.95	-93.46	-93.20	-93.40	-93.24	-93.55	-93.41	-93.76	-93.58	-93.84
25	-93.28	-94.01	-93.20	-93.64	-93.16	-93.23	-93.16	-93.31	-93.47	-94.01	-93.54	-93.88
26	-93.03	-93.30	-93.22	-93.46	-93.16	-93.22	-93.03	-93.18	-93.61	-93.92	-93.49	-94.04
27	-92.91	-93.54	-93.03	-93.22	-93.11	-93.18	-92.85	-93.03	-93.52	-93.83	-93.51	-93.95
28	-93.08	-93.67	-92.85	-93.33	-93.11	-93.20	-92.85	-92.95	-93.46	-93.70	-93.46	-93.69
29	-92.98	-93.54	-93.04	-93.31	-93.04	-93.15	-92.89	-93.15	-93.33	-93.84	-93.47	-93.75
30	-93.44	-93.93	-92.97	-93.30	-92.97	-93.21	-92.96	-93.40	---	---	-93.41	-93.73
31	-93.34	-93.70	---	---	-93.12	-93.41	-93.17	-93.60	---	---	-93.35	-93.70
MONTH	-92.74	-94.34	-92.85	-94.57	-92.96	-94.78	-92.85	-94.12	-93.02	-94.01	-93.19	-94.43

CHARLES COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-93.23	-93.68	-95.40	-95.52	-95.57	-96.31	-96.08	-96.94	-95.60	-95.83	-96.59	-97.51
2	-93.26	-93.71	-94.51	-95.43	-96.31	-96.79	-96.08	-96.52	-95.59	-96.02	-96.95	-97.87
3	-93.18	-93.44	-94.34	-95.14	-96.71	-97.49	-96.08	-96.99	-95.63	-96.44	-97.12	-97.94
4	-93.11	-93.28	-95.14	-95.87	-96.71	-97.15	-95.73	-96.08	-95.82	-96.39	-96.72	-97.51
5	-93.18	-93.58	-95.22	-96.42	-96.20	-96.89	-95.58	-95.75	-95.86	-96.14	-96.63	-97.66
6	-93.34	-93.73	-94.91	-95.35	-96.09	-96.85	-95.56	-96.64	-95.66	-95.99	-96.47	-96.74
7	-93.32	-93.74	-95.35	-95.71	-95.99	-96.60	-95.99	-96.31	-95.38	-95.66	-96.44	-97.79
8	-93.20	-93.56	-95.49	-95.75	-96.03	-96.78	-95.96	-96.85	-95.31	-95.39	-96.93	-97.45
9	-93.14	-93.20	-94.80	-95.71	-96.30	-97.08	-96.08	-96.42	-95.29	-95.82	-96.66	-97.59
10	-93.10	-93.20	-94.70	-95.70	-96.50	-97.19	-96.01	-97.00	-95.56	-95.95	-96.77	-97.78
11	-93.10	-93.16	-95.50	-96.07	-96.29	-96.85	-95.88	-96.09	-95.58	-96.03	-96.89	-97.47
12	-92.97	-93.13	-95.79	-96.73	-95.97	-96.33	-95.83	-96.74	-95.75	-96.33	-96.75	-97.75
13	-92.88	-92.98	-95.88	-96.22	-95.77	-95.99	-95.94	-96.48	-95.80	-96.08	-96.76	-97.86
14	-92.85	-93.08	-95.99	-96.92	-95.69	-96.32	-96.09	-96.95	-95.69	-96.19	-97.04	-98.52
15	-92.93	-93.58	-96.16	-97.37	-95.87	-96.41	-96.10	-96.51	-95.76	-96.39	-97.29	-98.05
16	-93.21	-93.71	-95.52	-96.55	-96.06	-96.74	-96.22	-97.05	-95.65	-96.18	-97.20	-98.23
17	-93.16	-93.38	-95.34	-96.17	-96.06	-96.53	-95.96	-96.44	-95.76	-96.33	-97.01	-97.44
18	-93.13	-93.24	-96.14	-96.60	-95.91	-96.36	-95.92	-96.83	-95.76	-96.76	-96.70	-97.11
19	-93.10	-94.11	-96.15	-96.59	-95.77	-96.09	-95.90	-96.50	-95.87	-96.54	-97.03	-97.10
20	-94.11	-94.48	-96.30	-96.59	-95.71	-95.95	-96.29	-96.63	-95.95	-96.54	-97.01	-97.84
21	-94.45	-94.81	-96.25	-96.60	-95.67	-96.18	-96.28	-97.16	-95.82	-96.16	-97.39	-98.35
22	-94.74	-95.10	-96.34	-96.54	-95.74	-96.36	-96.37	-96.74	-95.66	-95.86	-97.82	-98.52
23	-94.82	-95.05	-96.31	-97.61	-95.83	-96.58	-96.27	-97.21	-95.63	-96.51	-97.76	-98.40
24	-94.47	-95.11	-96.41	-96.84	-95.97	-96.57	-96.08	-96.41	-95.91	-96.45	-98.07	-98.48
25	-93.94	-94.47	-96.51	-97.72	-96.06	-96.54	-95.94	-96.11	-96.12	-97.04	-97.59	-98.07
26	-93.80	-94.50	-96.81	-97.92	-95.83	-96.19	-95.88	-96.28	-96.21	-96.91	-97.50	-98.05
27	-94.21	-94.65	-96.53	-96.90	-95.86	-96.59	-95.78	-96.26	-96.44	-97.27	-97.41	-98.58
28	-94.05	-94.74	-96.49	-96.82	-95.97	-96.31	-95.78	-96.16	-96.22	-96.93	-97.68	-98.37
29	-94.07	-94.94	-96.56	-96.85	-96.07	-96.50	-95.77	-96.18	-96.16	-97.10	-97.56	-98.42
30	-94.77	-96.43	-96.09	-97.57	-95.99	-96.40	-95.81	-96.30	-96.15	-97.07	-97.69	-98.50
31	---	---	-95.69	-96.64	---	---	-95.68	-96.00	-96.36	-97.39	---	---
MONTH	-92.85	-96.43	-94.34	-97.92	-95.57	-97.49	-95.56	-97.21	-95.29	-97.39	-96.44	-98.58
YEAR	-92.74	-98.58										

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Cc 34. SITE ID.--383441077063901. PERMIT NUMBER.--CH-94-0897.

LOCATION.--Lat 38°34'41", long 77°06'39", Hydrologic Unit 02070011, at Mattawoman Water Treatment Plant. Owner: Maryland Geological Survey.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 975 ft; casing diameter 4 in., to 874 ft, 884 to 945 ft, and 965 to 975 ft; screen diameter 4 in., from 874 to 884 ft, and 945 to 955 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 41.82 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 3.0 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal. A ground-water pumping test began on September 21, 1999, at a nearby production well with the deepest drawdown recorded as 24.16 ft below sea level on October 1, 1999.

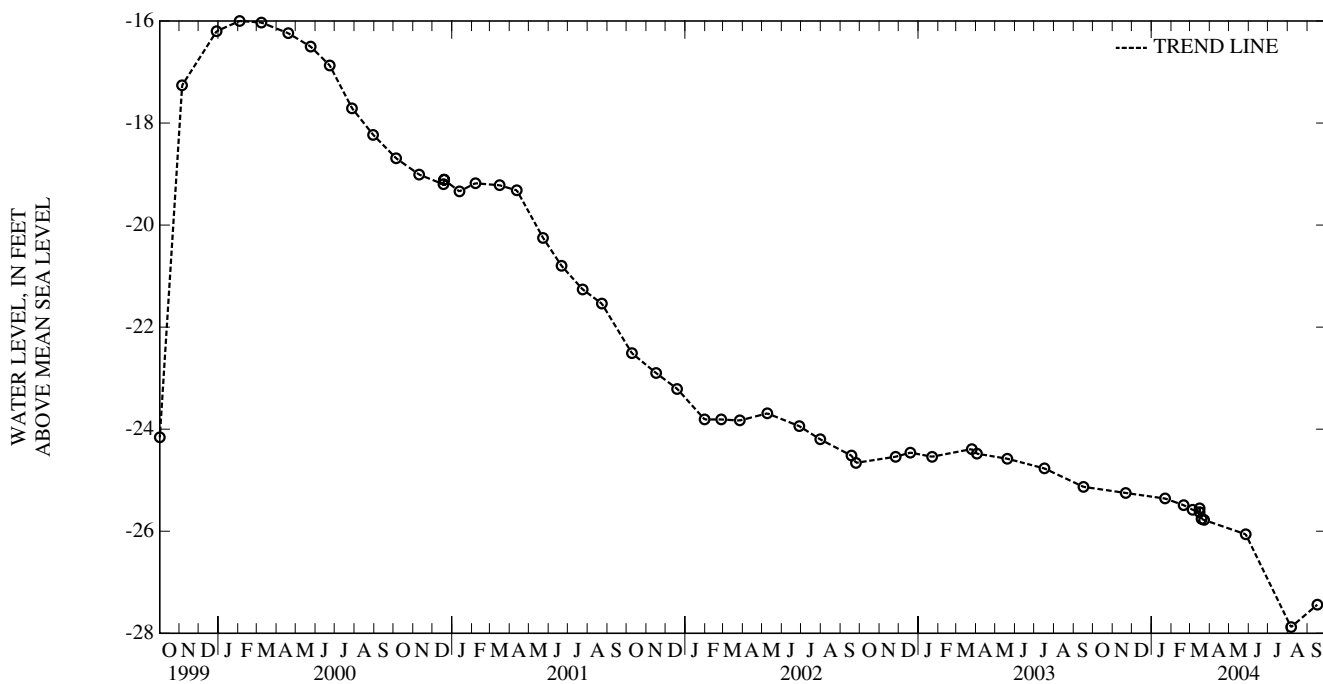
PERIOD OF RECORD.--August 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.80 ft below sea level (recorder), October 8, 1996; lowest measured, 27.88 ft below sea level, August 6, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-25.25	MAR 05, 2004	-25.58	MAR 19, 2004	-25.76	AUG 06, 2004	-27.88
JAN 22, 2004	-25.36	16	-25.63	23	-25.78	SEP 16	-27.44
FEB 20	-25.49	16	-25.55	MAY 27	-26.06		

LOWEST -27.88 AUG 06, 2004
HIGHEST -25.25 NOV 21, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Ce 37. SITE ID.--383236076563901. PERMIT NUMBER.--CH-73-0219.

LOCATION.--Lat 38°32'36", long 76°56'39", Hydrologic Unit 02070011, at La Plata Water Treatment Plant, 2.0 mi. northeast of La Plata. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,340 ft; casing diameter 6 in., to 300 ft; casing diameter 4 in., from 300 to 1,174 ft, 1,184 to 1,250 ft, and 1,260 to 1,330 ft; screen diameter 4 in., from 1,174 to 1,184 ft, 1,250 to 1,260 ft, and 1,330 to 1,340 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with graphic water-level recorder from November 1973 to December 1975. Equipped with digital water-level recorder--15-minute recorder interval from July 1976 to October 1998.

DATUM.--Elevation of land surface is 184.95 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.62 ft above land surface.

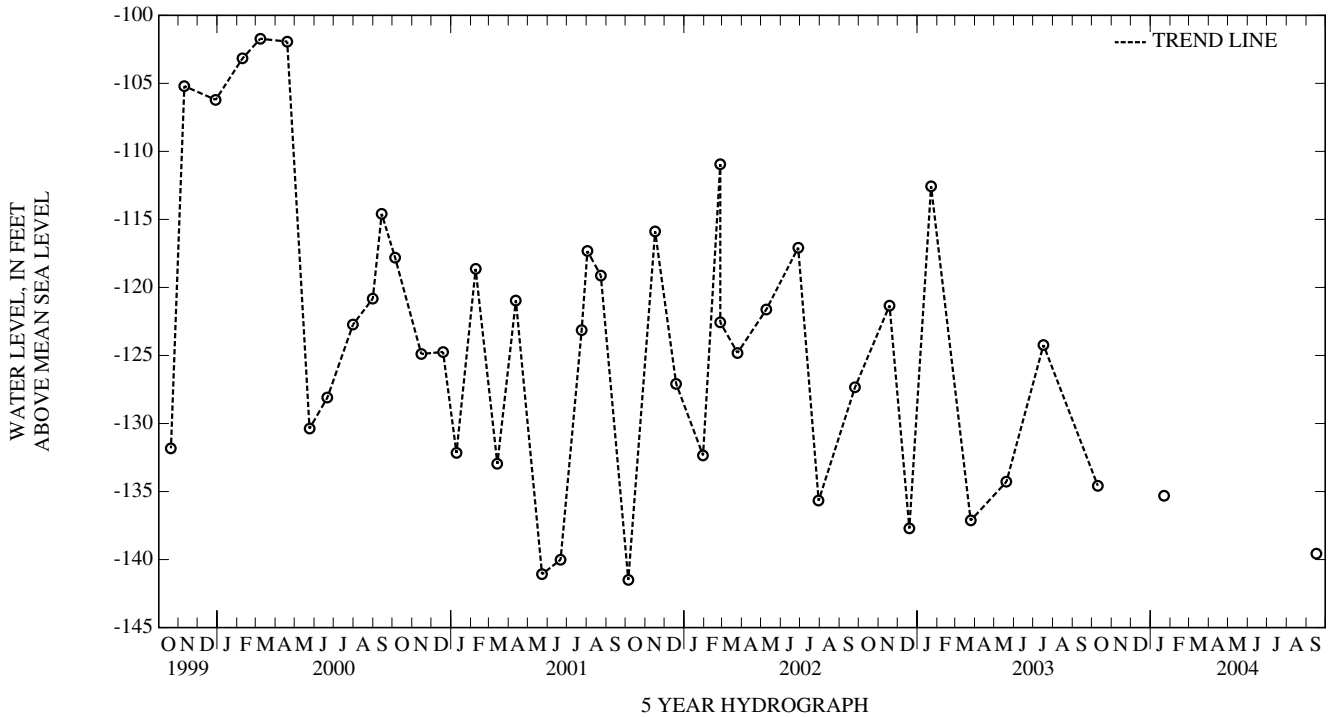
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--November 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.19 ft below sea level, November 5, 1973; lowest measured, 147.94 ft below sea level, August 17, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10, 2003	-134.57	JAN 22, 2004	-135.30	SEP 16, 2004	-139.57
LOWEST -139.57 SEP 16, 2004					
HIGHEST -134.57 OCT 10, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Ce 56. SITE ID.--383251076583901. PERMIT NUMBER.--CH-94-1111

LOCATION.--Lat 38°32'51", long 76°58'39", Hydrologic Unit 02070011, Heritage Green, LaPlata. Owner: Town of La Plata.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,268 ft; casing diameter 6 in., to 475 ft; 4 in., from 475 to 896 ft, 906 to 945 ft, 950 to 957 ft, 962 to 993 ft, 1,008 to 1,024 ft, 1,029 to 1,037 ft, 1,042 to 1,094 ft, 1,134 to 1,166 ft, 1,186 to 1,204 ft, 1,214 to 1,248 ft and 1,258 to 1,268 ft; Screen diameter 4 in. from 896 to 906 ft, 945 to 950 ft, 957 to 962 ft, 993 to 1,008 ft, 1,024 to 1,029 ft, 1,037 to 1,042 ft, 1,094 to 1,134 ft, 1,166 to 1,186 ft, 1,204 to 1,214 ft and 1,248 to 1,258 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval, August 1997 to current year.

DATUM.--Elevation of land surface is 196.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform 2.85 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--March 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 87.67 ft below sea level, July 15, 1997; lowest measured, 175.90 ft below sea level, July 21 and 22, 2004 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

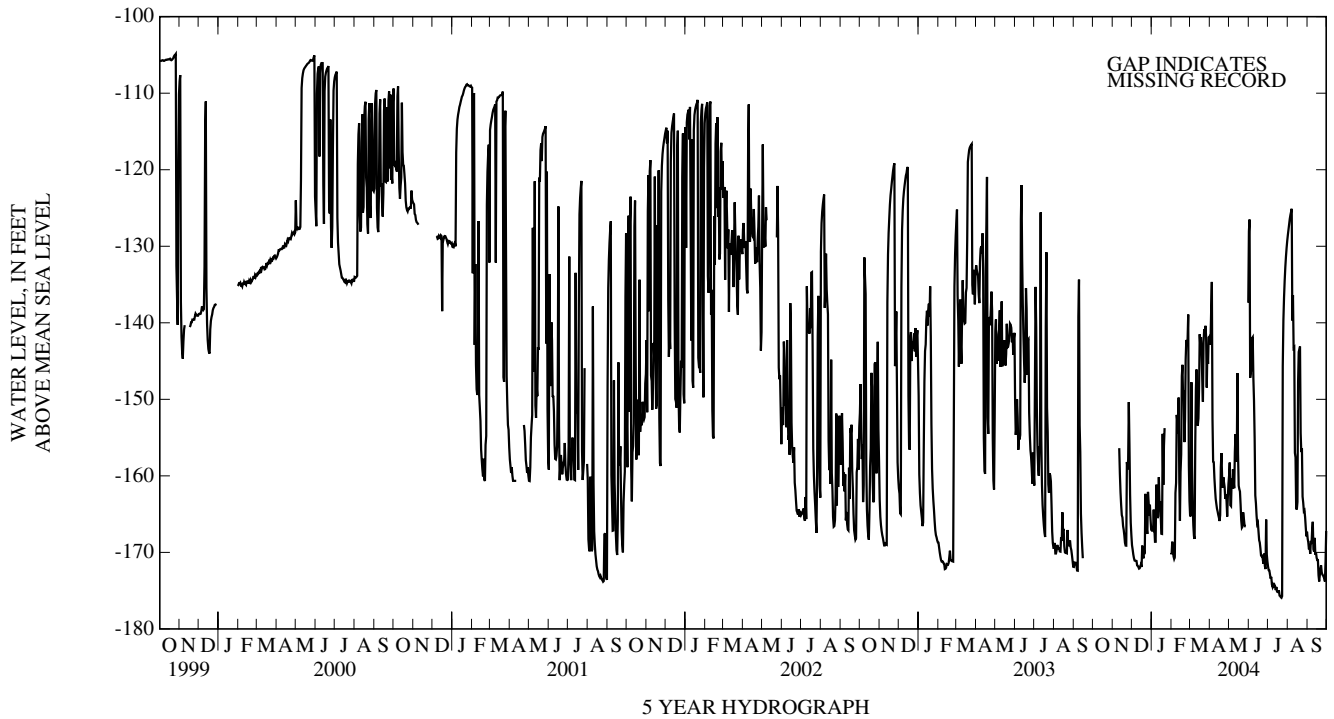
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-169.34	APR 08, 2004	-156.23	AUG 06, 2004	-125.56
JAN 22, 2004	-150.57	MAY 27	-166.07	SEP 16	-128.04
LOWEST -169.34 NOV 21, 2003					
HIGHEST -125.56 AUG 06, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	-119.2	-119.3	-167.7	-169.1	-149.3	-167.1	-141.8	-170.2	-163.3	-165.3
2	---	---	-119.0	-119.2	-168.9	-169.6	-148.1	-167.1	-146.4	-168.6	-135.4	-165.1
3	---	---	-118.8	-119.0	-169.5	-170.3	-148.2	-167.2	-161.5	-169.6	-131.4	-147.8
4	---	---	-118.7	-118.8	-170.1	-170.7	-147.9	-164.4	-169.6	-170.5	-129.3	-158.7
5	---	---	-118.5	-118.7	-170.4	-171.1	-147.5	-166.9	-170.2	-170.8	-147.0	-164.1
6	---	---	-118.4	-118.5	-163.6	-171.1	-166.9	-168.6	-141.7	-170.6	-164.1	-166.5
7	---	---	-118.4	-118.5	-153.3	-171.1	-148.1	-168.6	-137.0	-162.2	-166.5	-167.9
8	---	---	-118.4	-118.4	-157.7	-171.1	-146.4	-161.2	-136.3	-160.9	-152.2	-168.2
9	---	---	---	---	-170.8	-171.7	-145.9	-161.6	-135.0	-152.0	-138.8	-155.6
10	---	---	---	---	-171.4	-171.8	-150.4	-165.5	-132.5	-153.0	-133.7	-148.7
11	---	---	-132.5	-156.4	-158.2	-171.9	-146.1	-165.3	-133.8	-154.5	-131.3	-146.1
12	---	---	-143.3	-159.8	-171.7	-172.1	-144.6	-160.2	-133.1	-149.8	-129.9	-149.9
13	---	---	-149.4	-162.2	-154.2	-172.1	-143.3	-163.7	-131.9	-160.6	-129.0	-153.4
14	---	---	-150.5	-163.8	-152.5	-171.8	-144.2	-163.3	-150.1	-165.9	-128.4	-152.5
15	---	---	-163.8	-165.1	-152.2	-171.6	-142.8	-165.3	-136.1	-159.5	-128.1	-148.5
16	---	---	-145.8	-165.4	-144.2	-171.9	-165.3	-167.6	-133.4	-157.2	-128.0	-141.5
17	---	---	-149.1	-166.6	-140.4	-169.1	-144.4	-167.6	-133.3	-147.0	-126.7	-143.2
18	---	---	-149.4	-167.1	-151.9	-170.5	-142.3	-154.5	-131.3	-145.5	-125.9	-141.9
19	---	---	-167.0	-167.8	-157.8	-170.8	-141.9	-161.2	-131.1	-150.1	-126.0	-143.7
20	---	---	-167.7	-168.8	-152.7	-169.8	-136.2	-156.1	-130.7	-148.8	-125.7	-147.6
21	---	---	-168.5	-169.1	-150.2	-169.9	-133.1	-153.8	-129.3	-155.6	-125.1	-150.3
22	---	---	-146.2	-169.1	-144.4	-162.3	---	---	-129.4	-152.6	-125.8	-142.5
23	---	---	-135.1	-158.2	-143.4	-166.8	---	---	-129.7	-144.8	-126.0	-140.9
24	---	---	-133.4	-159.2	-150.2	-166.9	---	---	-128.8	-142.2	-125.6	-141.6
25	---	---	-132.2	-157.9	-148.6	-167.6	---	---	-128.8	-142.8	-125.7	-140.4
26	---	---	-129.9	-150.4	-149.4	-162.1	---	---	-127.3	-142.2	-125.3	-141.8
27	---	---	-128.6	-155.9	-148.4	-163.4	---	---	-127.0	-138.9	-126.2	-148.5
28	---	---	-132.1	-162.5	-148.0	-165.2	---	---	-126.2	-158.6	-126.7	-143.4
29	---	---	-162.5	-166.1	-148.4	-163.8	---	---	-146.6	-163.3	-126.2	-145.4
30	---	---	-166.1	-167.7	-144.9	-165.7	---	---	---	---	-126.6	-141.9
31	---	---	---	---	-150.4	-167.0	-169.2	-170.1	---	---	-125.8	-141.8
MONTH	---	---	-118.4	-169.1	-140.4	-172.1	-133.1	-170.1	-126.2	-170.8	-125.1	-168.2

CHARLES COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER						
1	-125.7	-142.9	-136.2	-159.9	-126.5	-128.0	-159.4	-171.9	-127.8	-128.5	-142.1	-168.2
2	-126.0	-142.0	-133.2	-158.3	-125.4	-126.5	-155.0	-172.3	-127.1	-127.8	-144.9	-168.7
3	-123.2	-138.1	-136.6	-163.8	-125.1	-147.2	-152.2	-172.4	-126.4	-127.1	-146.2	-169.6
4	-121.9	-134.7	-136.9	-163.9	-130.8	-146.4	-168.8	-172.9	-125.9	-126.4	-146.7	-169.2
5	-121.2	-152.6	-134.5	-160.3	-128.3	-146.2	-155.8	-173.4	-125.5	-125.9	-145.7	-170.2
6	-135.8	-158.2	-133.8	-161.7	-126.5	-142.0	-165.1	-173.2	-125.1	-125.5	-144.6	-168.5
7	-136.2	-158.2	-133.3	-159.2	-125.8	-141.9	-173.2	-174.2	-124.8	-125.1	-142.2	-168.9
8	-135.3	-160.3	-136.4	-160.6	-126.4	-147.2	-159.7	-174.5	-124.8	-139.7	-140.8	-167.1
9	-140.7	-161.8	-133.0	-161.6	-126.5	-150.2	-161.7	-174.2	-124.5	-136.4	-144.1	-166.0
10	-143.7	-163.0	-132.2	-156.9	-130.5	-155.2	-158.0	-174.4	-126.4	-143.3	-144.2	-169.6
11	-144.4	-163.7	-131.6	-154.6	-155.2	-162.6	-153.3	-174.2	-125.9	-143.2	-144.7	-169.9
12	-146.5	-164.3	-131.5	-156.7	-145.3	-163.6	-164.7	-174.4	-132.2	-157.0	-145.7	-168.1
13	-145.6	-164.7	-130.6	-158.1	-148.7	-165.2	-157.0	-174.9	-136.6	-157.6	-144.5	-170.3
14	-148.3	-165.1	-128.6	-146.6	-142.9	-166.3	-160.0	-174.5	-143.4	-164.2	-144.7	-170.0
15	-147.0	-165.4	-131.0	-157.1	-148.4	-166.1	-161.5	-175.1	-143.8	-164.4	-148.6	-170.7
16	-153.8	-165.9	-143.7	-161.3	-154.4	-167.3	-159.3	-175.2	-136.7	-163.4	-146.0	-171.0
17	-136.8	-165.2	-135.8	-161.7	-149.9	-168.4	-153.9	-175.2	-131.6	-147.7	-151.9	-171.0
18	-133.1	-158.8	-138.1	-162.0	-152.9	-168.7	-167.1	-175.0	-130.0	-143.8	-171.0	-173.0
19	-134.1	-157.0	-148.2	-163.8	-153.7	-169.5	-163.4	-175.6	-129.2	-143.5	-157.4	-173.8
20	-143.1	-160.0	-151.1	-165.8	-155.4	-170.4	-163.8	-175.7	-127.7	-143.1	-151.6	-173.0
21	-139.0	-161.5	-144.7	-166.8	-152.5	-170.5	-164.1	-175.9	-127.6	-154.4	-150.2	-172.1
22	-138.5	-160.2	-137.6	-166.6	-146.1	-170.3	-161.2	-175.9	-134.0	-156.9	-152.7	-171.7
23	-135.7	-160.8	-139.9	-164.8	-167.8	-171.1	-145.7	-175.7	-134.4	-156.4	-149.0	-172.6
24	-144.9	-161.5	-143.0	-165.5	-145.2	-171.5	-139.7	-145.7	-137.0	-162.7	-156.7	-172.9
25	-140.8	-163.0	-141.7	-166.3	-150.2	-170.2	-136.7	-139.7	-139.0	-163.5	-156.9	-173.0
26	-141.0	-162.4	-140.2	-166.6	-167.4	-171.8	-134.5	-136.7	-137.0	-164.6	-158.6	-173.2
27	-144.9	-163.3	-139.2	-166.6	-146.6	-172.2	-132.7	-134.5	-138.4	-164.5	-157.9	-173.4
28	-142.0	-165.3	---	---	-143.2	-165.7	-131.4	-132.7	-141.4	-165.4	-154.7	-173.8
29	-136.5	-162.8	---	---	-158.6	-170.3	-130.2	-131.4	-145.6	-166.7	-153.2	-171.2
30	-138.3	-161.0	---	---	-157.5	-171.2	-129.3	-130.2	-143.7	-167.9	-146.6	-167.2
31	---	---	-128.0	-137.4	---	---	-128.4	-129.3	-141.4	-167.3	---	---
MONTH	-121.2	-165.9	-128.0	-166.8	-125.1	-172.2	-128.4	-175.9	-124.5	-167.9	-140.8	-173.8
YEAR	-118.4	-175.9										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Ce 57. SITE ID.--383250076584001. PERMIT NUMBER.--CH-94-1112

LOCATION.--Lat 38°32'50", long 76°58'40", Hydrologic Unit 02070011, Heritage Green, LaPlata. Owner: Town of La Plata.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,703 ft; casing diameter 6 in., to 400 ft; 4 in., from 400 to 1,406 ft, 1,421 to 1,500 ft, 1,515 to 1,668 ft, and 1,698 to 1,703 ft. Screen diameter 4 in., from 1,406 to 1,421 ft, 1,500 to 1,515 ft, and 1,668 to 1,698 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, March 1997 to July 1998.

DATUM.--Elevation of land surface is 193.47 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 5.0 ft above land surface.

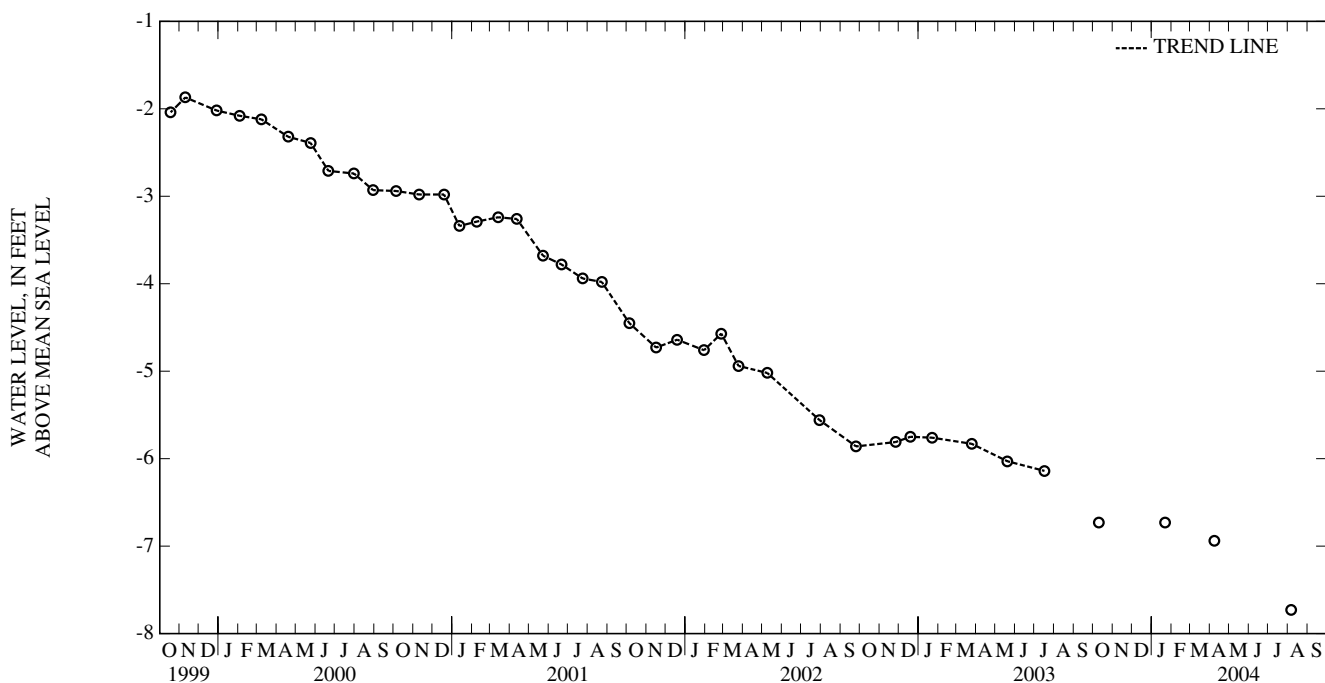
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--March 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.13 ft above sea level, May 1, 1997 (recorder); lowest measured, 7.73 ft below sea level, August 6, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10, 2003	-6.73	JAN 22, 2004	-6.73	APR 08, 2004	-6.94	AUG 06, 2004	-7.73
LOWEST -7.73		AUG 06, 2004					
HIGHEST -6.73		OCT 10, 2003					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Cg 24. SITE ID.--383254076481401. PERMIT NUMBER.--CH-94-4194.

LOCATION.--Lat 38°32'54", long 76°48'14", Hydrologic Unit 02070011, at Hughesville Pond. Owner: Maryland Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 835 ft; casing diameter 12 in., to 41 ft, casing diameter 4 in., from +3.7 to 795 ft, and 825 to 835 ft; screen diameter 4 in., from 795 to 825 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, April 2002 to current year.

DATUM.--Elevation of land surface is 171.04 ft above North American Vertical Datum of 1988. Measuring point: Top of 4 in. coupling, 3.75 ft above land surface.

REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels are affected by regional ground-water withdrawal.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.80 ft below sea level, April 3, 2002 (recorder); lowest measured, 51.19 ft below sea level, September 24, 2004 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

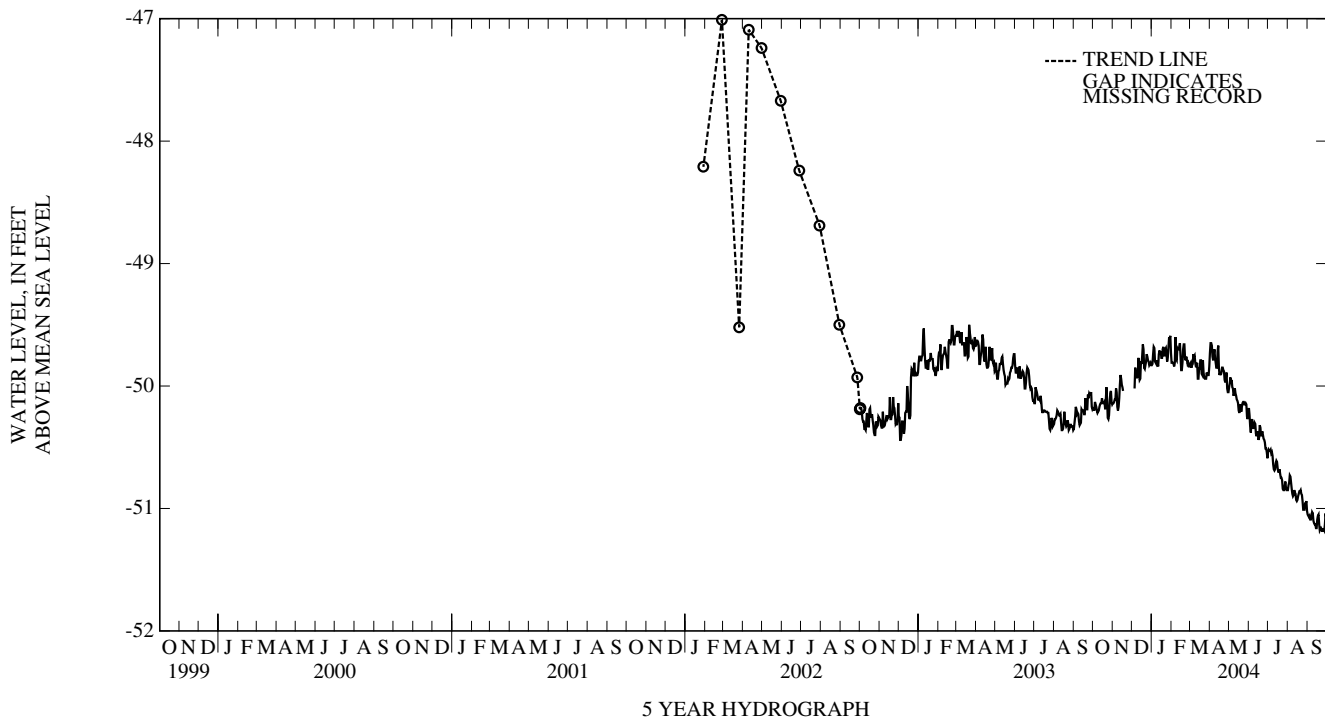
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	-50.05	JAN 15, 2004	-49.66	APR 15, 2004	-49.79
NOV 20	-49.89	FEB 12	-49.69	JUN 01	-50.16
DEC 16	-49.79	MAR 17	-49.74	25	-50.43
LOWEST -50.43		JUN 25, 2004			
HIGHEST -49.66		JAN 15, 2004			

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	-50.16	-50.18	-50.11	-50.14	---	---	-49.79	-49.83	-49.73	-49.81	-49.80	-49.82
2	-50.16	-50.18	-50.12	-50.14	---	---	-49.74	-49.82	-49.81	-49.81	-49.74	-49.81
3	-50.13	-50.20	-50.09	-50.13	---	---	-49.68	-49.74	-49.57	-49.81	-49.81	-49.85
4	-50.07	-50.13	-50.09	-50.11	---	---	-49.64	-49.68	-49.65	-49.82	-49.78	-49.83
5	-50.10	-50.15	-50.02	-50.11	-49.82	-50.02	-49.61	-49.69	-49.81	-49.84	-49.69	-49.82
6	-50.15	-50.17	-49.93	-50.02	-49.81	-49.85	-49.69	-49.80	-49.47	-49.81	-49.62	-49.74
7	-50.16	-50.20	-49.95	-50.05	-49.85	-49.90	-49.79	-49.81	-49.46	-49.60	-49.64	-49.76
8	-50.20	-50.22	-50.05	-50.17	-49.90	-49.93	-49.78	-49.82	-49.60	-49.78	-49.66	-49.75
9	-50.20	-50.21	-50.17	-50.20	-49.92	-49.93	-49.77	-49.79	-49.69	-49.79	-49.75	-49.81
10	-50.16	-50.20	-50.10	-50.17	-49.67	-49.92	-49.79	-49.82	-49.59	-49.69	-49.81	-49.84
11	-50.15	-50.17	-49.99	-50.10	-49.55	-49.77	-49.74	-49.84	-49.59	-49.70	-49.74	-49.84
12	-50.10	-50.15	-49.80	-49.99	-49.77	-49.90	-49.69	-49.74	-49.68	-49.70	-49.74	-49.81
13	-50.12	-50.14	-49.79	-49.91	-49.90	-49.95	-49.64	-49.71	-49.65	-49.68	-49.81	-49.94
14	-49.89	-50.14	-49.91	-49.94	-49.63	-49.94	-49.57	-49.74	-49.62	-49.65	-49.86	-49.94
15	-49.88	-50.10	-49.94	-49.99	-49.63	-49.80	-49.55	-49.72	-49.62	-49.76	-49.85	-49.86
16	-50.10	-50.13	-49.99	-50.01	-49.75	-49.82	-49.72	-49.77	-49.76	-49.87	-49.69	-49.86
17	-50.13	-50.14	-50.01	-50.04	-49.59	-49.75	-49.70	-49.77	-49.81	-49.87	-49.73	-49.79
18	-50.11	-50.14	---	---	-49.63	-49.66	-49.45	-49.70	-49.69	-49.81	-49.76	-49.79
19	-50.09	-50.13	---	---	-49.66	-49.70	-49.57	-49.68	-49.63	-49.70	-49.73	-49.90
20	-50.11	-50.19	---	---	-49.70	-49.85	-49.68	-49.75	-49.53	-49.66	-49.69	-49.91
21	-49.94	-50.11	---	---	-49.83	-49.86	-49.70	-49.75	-49.51	-49.66	-49.66	-49.79
22	-49.96	-50.01	---	---	-49.79	-49.83	-49.57	-49.70	-49.66	-49.77	-49.79	-49.89
23	-50.01	-50.11	---	---	-49.74	-49.80	-49.64	-49.69	-49.76	-49.79	-49.89	-49.93
24	-50.11	-50.26	---	---	-49.60	-49.74	-49.62	-49.74	-49.71	-49.76	-49.92	-49.94
25	-50.24	-50.27	---	---	-49.68	-49.76	-49.74	-49.80	-49.72	-49.79	-49.94	-49.94
26	-50.14	-50.24	---	---	-49.76	-49.79	-49.69	-49.77	-49.79	-49.82	-49.89	-49.94
27	-50.00	-50.14	---	---	-49.77	-49.80	-49.53	-49.69	-49.80	-49.81	-49.85	-49.89
28	-50.02	-50.06	---	---	-49.80	-49.83	-49.53	-49.61	-49.81	-49.84	-49.85	-49.91
29	-49.92	-50.04	---	---	-49.69	-49.82	-49.59	-49.61	-49.82	-49.84	-49.91	-49.91
30	-50.04	-50.13	---	---	-49.65	-49.81	-49.55	-49.59	---	---	-49.84	-49.91
31	-50.13	-50.15	---	---	-49.79	-49.83	-49.58	-49.73	---	---	-49.73	-49.84
MONTH	-49.88	-50.27	-49.79	-50.20	-49.55	-50.02	-49.45	-49.84	-49.46	-49.87	-49.62	-49.94

CHARLES COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-49.57	-49.73	-49.98	-50.01	-50.12	-50.18	-50.49	-50.54	-50.81	-50.85	-51.02	-51.05
2	-49.58	-49.65	-49.88	-49.98	-50.17	-50.24	-50.49	-50.52	-50.79	-50.81	-51.05	-51.06
3	-49.63	-49.65	-49.88	-49.93	-50.24	-50.33	-50.49	-50.53	-50.73	-50.79	-51.06	-51.07
4	-49.57	-49.67	-49.90	-49.98	-50.30	-50.38	-50.50	-50.53	-50.73	-50.73	-51.06	-51.06
5	-49.67	-49.76	-49.91	-49.95	-50.20	-50.30	-50.50	-50.52	-50.73	-50.74	-51.06	-51.09
6	-49.73	-49.79	-49.93	-50.01	-50.22	-50.27	-50.52	-50.55	-50.73	-50.79	-51.07	-51.09
7	-49.68	-49.74	-49.97	-50.02	-50.27	-50.31	-50.53	-50.54	-50.79	-50.84	-51.03	-51.07
8	-49.67	-49.70	-49.98	-50.08	-50.31	-50.35	-50.53	-50.57	-50.84	-50.88	-50.96	-51.03
9	-49.68	-49.77	-50.02	-50.06	-50.30	-50.33	-50.57	-50.64	-50.88	-50.90	-50.94	-51.04
10	-49.77	-49.81	-50.01	-50.02	-50.29	-50.30	-50.64	-50.68	-50.85	-50.89	-51.04	-51.10
11	-49.80	-49.85	-50.02	-50.06	-50.27	-50.31	-50.67	-50.69	-50.84	-50.85	-51.09	-51.12
12	-49.72	-49.85	-50.06	-50.08	-50.29	-50.39	-50.61	-50.68	-50.82	-50.87	-51.11	-51.13
13	-49.57	-49.72	-50.08	-50.11	-50.37	-50.41	-50.61	-50.63	-50.82	-50.88	-51.12	-51.13
14	-49.59	-49.67	-50.11	-50.12	-50.34	-50.37	-50.53	-50.61	-50.88	-50.93	-51.12	-51.16
15	-49.67	-49.85	-50.11	-50.14	-50.35	-50.39	-50.56	-50.62	-50.89	-50.94	-51.09	-51.16
16	-49.85	-49.91	-50.14	-50.20	-50.39	-50.44	-50.62	-50.67	-50.90	-50.93	-51.05	-51.09
17	-49.86	-49.89	-50.18	-50.22	-50.30	-50.42	-50.67	-50.70	-50.88	-50.90	-50.91	-51.06
18	-49.87	-49.91	-50.14	-50.18	-50.29	-50.32	-50.64	-50.70	-50.83	-50.88	-50.89	-51.05
19	-49.82	-49.89	-50.12	-50.15	-50.30	-50.34	-50.64	-50.68	-50.84	-50.86	-51.05	-51.13
20	-49.82	-49.85	-50.15	-50.21	-50.34	-50.41	-50.68	-50.72	-50.84	-50.86	-51.13	-51.18
21	-49.83	-49.85	-50.13	-50.17	-50.37	-50.39	-50.72	-50.75	-50.81	-50.85	-51.14	-51.17
22	-49.83	-49.87	-50.12	-50.14	-50.33	-50.37	-50.73	-50.75	-50.85	-50.88	-51.13	-51.16
23	-49.87	-49.88	-50.11	-50.13	-50.33	-50.40	-50.73	-50.77	-50.88	-50.89	-51.13	-51.17
24	-49.88	-49.95	-50.12	-50.13	-50.39	-50.43	-50.77	-50.84	-50.88	-50.94	-51.15	-51.19
25	-49.93	-49.97	-50.13	-50.15	-50.41	-50.44	-50.84	-50.85	-50.94	-51.01	-51.14	-51.17
26	-49.86	-49.93	-50.13	-50.15	-50.40	-50.46	-50.82	-50.85	-50.98	-51.01	-51.13	-51.17
27	-49.82	-49.89	-50.13	-50.14	-50.46	-50.51	-50.75	-50.82	-50.96	-51.01	-51.13	-51.18
28	-49.89	-50.02	-50.09	-50.15	-50.47	-50.51	-50.75	-50.78	-50.93	-50.96	-50.86	-51.13
29	-50.02	-50.05	-50.15	-50.25	-50.48	-50.54	-50.77	-50.83	-50.93	-50.96	-50.92	-51.04
30	-50.01	-50.05	-50.21	-50.27	-50.49	-50.59	-50.81	-50.85	-50.89	-50.94	-51.03	-51.08
31	---	---	-50.11	-50.21	---	---	-50.83	-50.85	-50.90	-51.02	---	---
MONTH	-49.57	-50.05	-49.88	-50.27	-50.12	-50.59	-50.49	-50.85	-50.73	-51.02	-50.86	-51.19
YEAR	-49.45	-51.19										

Daily Low Water Levels



CHARLES COUNTY--Continued

WELL NUMBER.--CH Da 18. SITE ID.--382654077152501.

LOCATION.--Lat 38°26'54", long 77°15'25", Hydrologic Unit 02070011, near Douglas Point. Owner: U.S. Bureau of Land Management.

AQUIFER.--Upper Patuxent aquifer in the Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled observation, artesian well, depth 740 ft; casing diameter 8 in., to 684 ft; and 694 to 730 ft; screen diameter 8 in., from 684 to 694 ft, and 730 to 740 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel. Twice yearly water level measurements from September 1976 to April 1996. Equipped with digital water-level recorder--60-minute recorder interval from April 1996 to June 1998.

DATUM.--Elevation of land surface is 89.90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder platform, 3.10 ft above land surface.

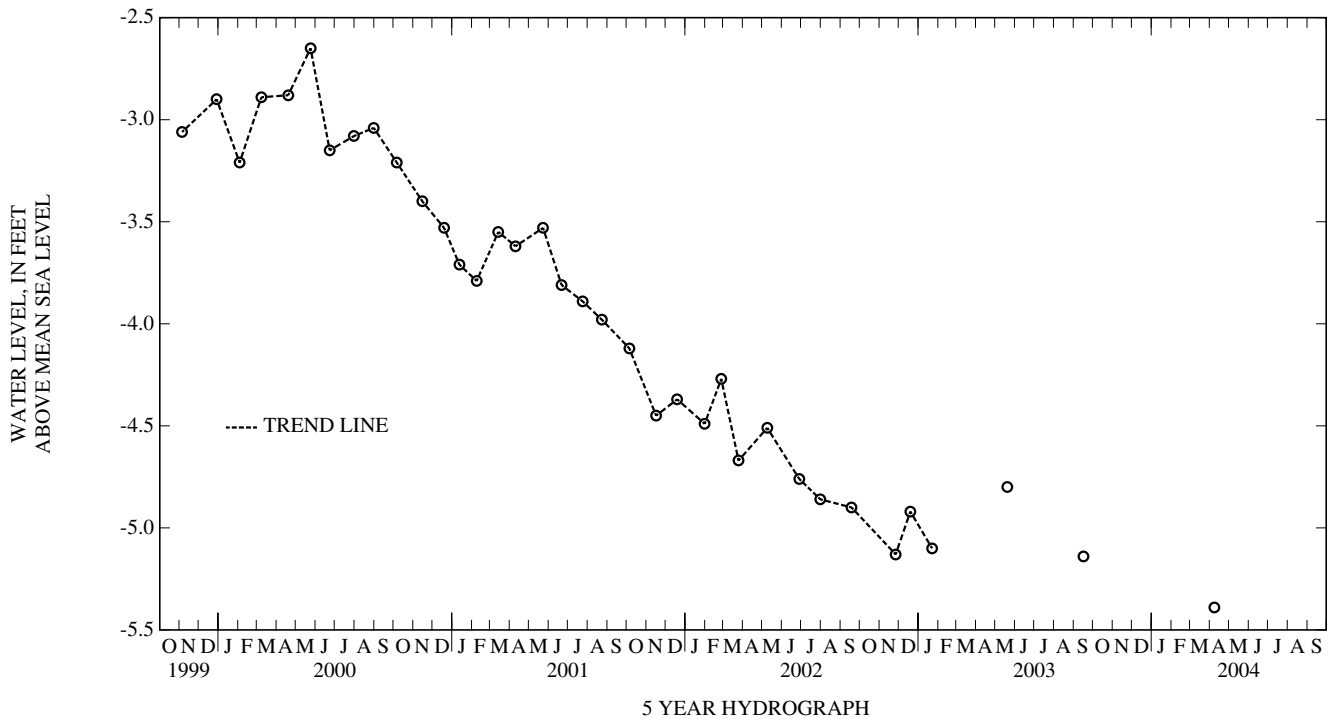
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--September 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.79 ft above sea level, September 21, 1976; lowest measured, 5.39 ft below sea level, April 8, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL
APR 08, 2004	-5.39



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Da 20. SITE ID.--382654077152701. PERMIT NUMBER.--CH-73-0590.

LOCATION.--Lat 38°26'54", long 77°15'27", Hydrologic Unit 02070011, near Douglas Point. Owner: U.S. Bureau of Land Management.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 522 ft; casing diameter 6 in., to 420 ft; 425 to 444 ft; 449 to 481 ft, and 486 to 517 ft; screen diameter 6 in., from 420 to 425 ft, 444 to 449 ft, 481 to 486 ft, and 517 to 522 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

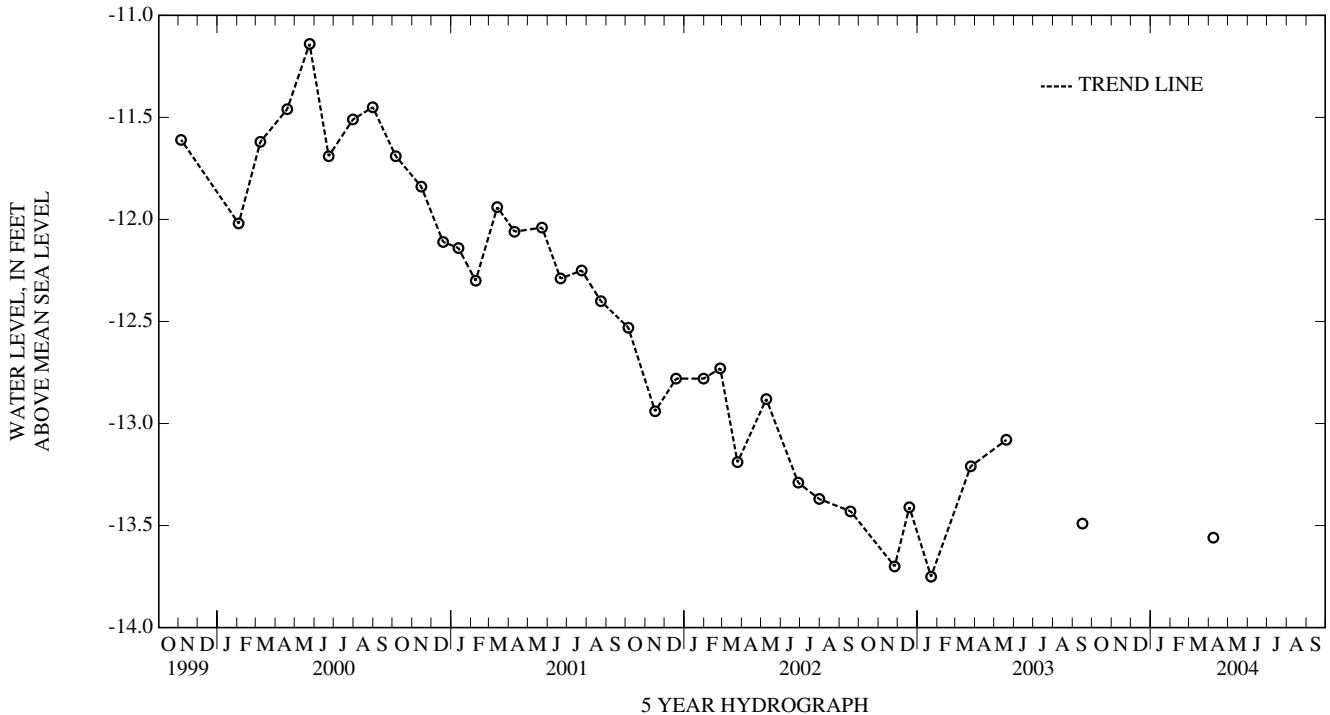
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--September 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.86 ft below sea level, March 22, 1979 and March 25, 1980; lowest measured, 13.75 ft below sea level, January 22, 2003.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL
APR 08, 2004	-13.56



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Dd 33. SITE ID.--382607077002601. PERMIT NUMBER.--CH-02-6769.

LOCATION.--Lat 38°25'09", long 77°00'00", Hydrologic Unit 02070011, 1.8 mi southwest of Faulkner off Popes Creek Rd. Owner: Jesuit Order (Loyola Retreat House).

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, institution, artesian well, depth 694 ft; casing diameter 6 in., to 564 ft; casing diameter 4 in., from 532 to 688 ft; screen diameter 4 in., from 687 to 694 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 99.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation and production well. Water level reported 104 ft below land surface, June 27, 1957. Water levels are affected by local and regional ground-water withdrawal. The May 30, 2001, water level of 134.17 ft below land surface resulted from an extended period of ground-water withdrawal from this well.

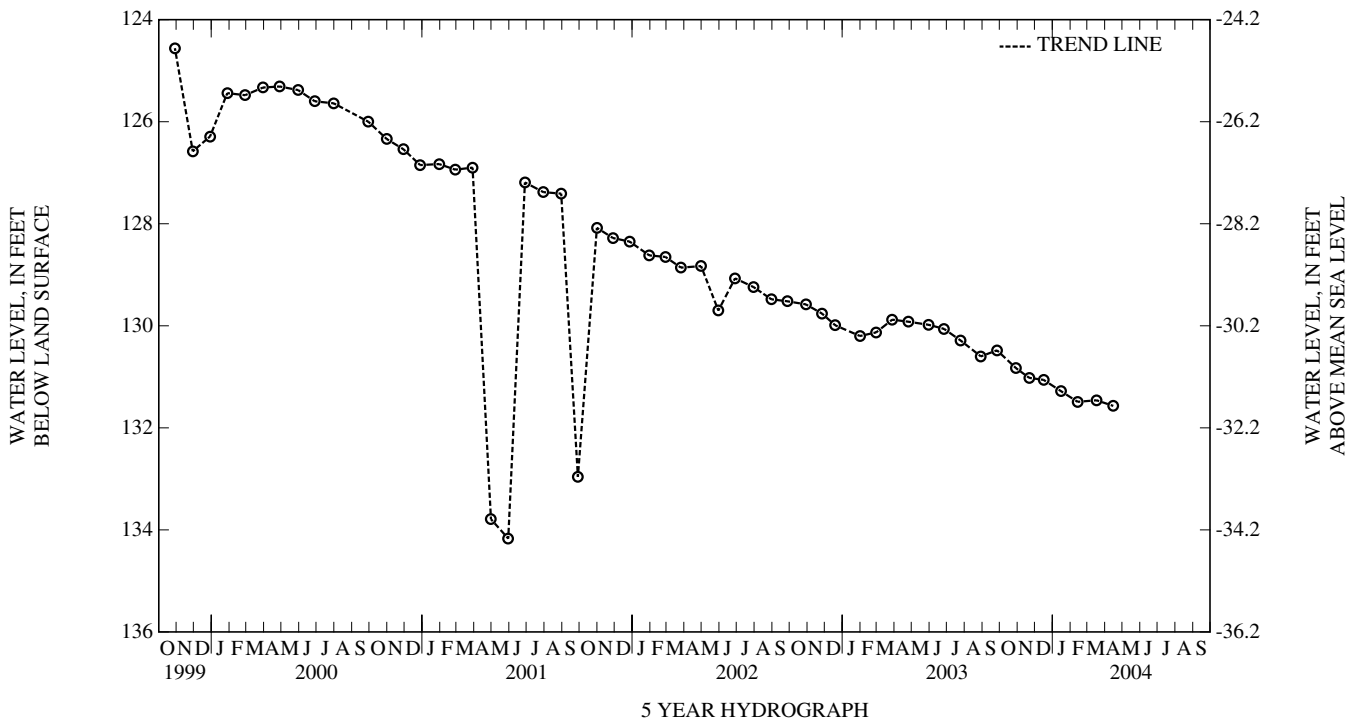
PERIOD OF RECORD.--March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.28 ft below land surface, March 14, 1962; lowest measured, 131.57 ft below land surface, April 15, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	130.83	DEC 16, 2003	131.06	FEB 13, 2004	131.49	APR 15, 2004	131.57
NOV 21	131.02	JAN 15, 2004	131.28	MAR 17	131.46		

HIGHEST 130.83 OCT 29, 2003
 LOWEST 131.57 APR 15, 2004



5 YEAR HYDROGRAPH
 OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Dd 38. SITE ID.--382925077010101. PERMIT NUMBER.--CH-81-0358.

LOCATION.--Lat 38°29'25", long 77°01'01", Hydrologic Unit 02070011, 0.8 mi south of Port Tobacco. Owner: Private Residence.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, depth 597 ft; casing diameter 4 in., to 297 ft; casing diameter 2 in., from 297 to 429 ft, 434 to 575 ft, 580 to 585 ft, and 590 to 597 ft; screen diameter 2 in., from 429 to 434 ft, 575 to 580 ft, and 585 to 590 ft.

INSTRUMENTATION.--Periodic water level measurements with chalked steel tape from April 1993 to December 1999, and October 2000 to current year by U.S. Geological Survey and Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

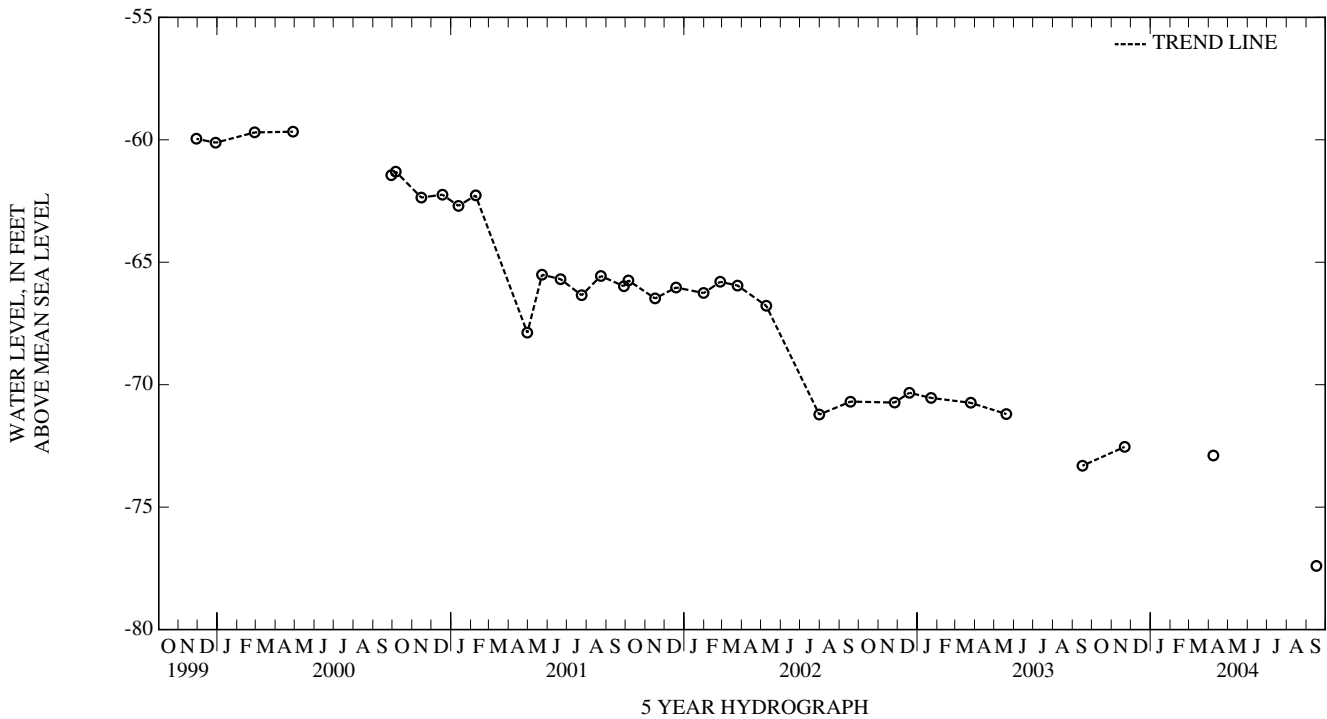
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground water withdrawal.

PERIOD OF RECORD.--April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.97 ft below sea level, May 5, 1993; lowest measured, 77.40 ft below sea level, September 16, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21, 2003	-72.54	APR 08, 2004	-72.89	SEP 16, 2004	-77.40
LOWEST -77.40 SEP 16, 2004					
HIGHEST -72.54 NOV 21, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH De 45. SITE ID.--382927076552301. PERMIT NUMBER.--CH-81-0604.

LOCATION.--Lat 38°29'27", long 76°55'23", Hydrologic Unit 02070011, north side of MD Rt. 6, 4.1 mi southeast of La Plata. Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Pleistocene age and Nanjemoy Formation of Lower Eocene age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well; depth 25.5 ft; casing diameter 4 in., to 15.5 ft, casing diameter 2 in., from 20.5 to 25.5 ft; screen diameter 2 in., from 15.5 to 20.5 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44.77 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.35 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

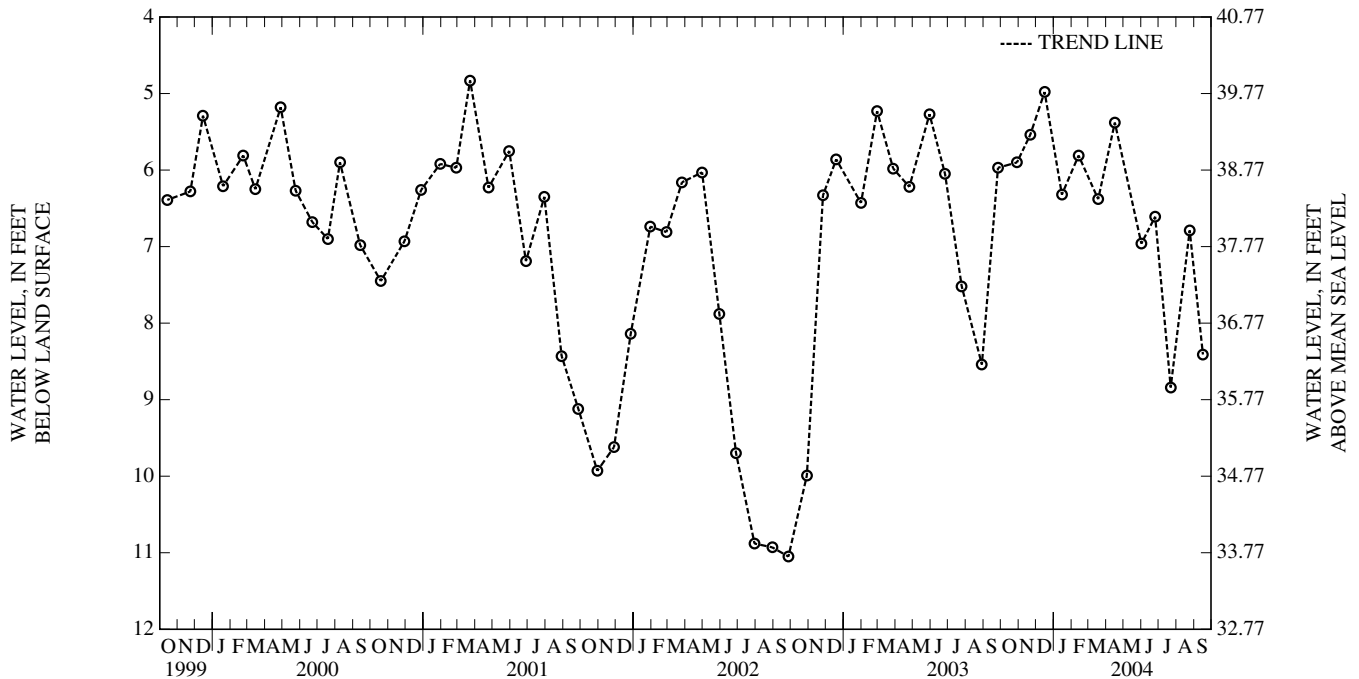
PERIOD OF RECORD.--August 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.83 ft below land surface, May 30, 1990 and March 23, 2001; lowest measured, 11.65 ft below land surface, December 9, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	5.90	JAN 15, 2004	6.32	APR 16, 2004	5.38	JUL 22, 2004	8.84
NOV 21	5.54	FEB 13	5.81	JUN 01	6.96	AUG 24	6.79
DEC 16	4.98	MAR 18	6.38	25	6.61	SEP 16	8.41

HIGHEST 4.98 DEC 16, 2003
 LOWEST 8.84 JUL 22, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Ee 16. SITE ID.--382103076560201.

LOCATION.--Lat 38°21'03", long 76°56'02", Hydrologic Unit 02070010, near Wayside. Owner: Private Residence.

AQUIFER.--Ravens Crest Formation of Upper Pliocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Dug, unused, water-table well, measured depth 20.7 ft; casing diameter 42 in.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder from March 1966 to October 1967.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.80 ft above land surface.

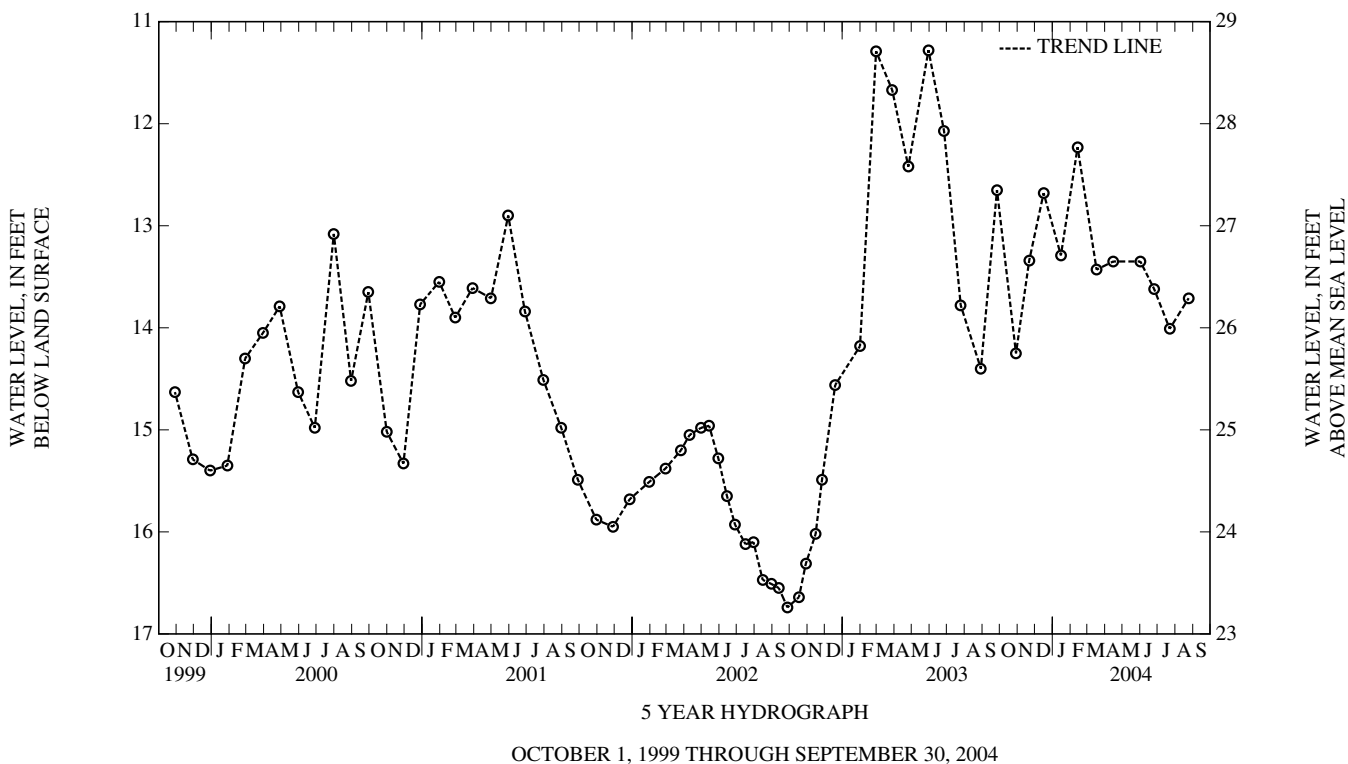
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well and Maryland Ground-Water-Quality Network observation well. Water levels respond to natural climatic affects.

PERIOD OF RECORD.--May 1946, January 1947 to November 1947, March 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.41 ft below land surface, March 30, 1994; lowest measured, 20.65 ft below land surface, December 20, 1949.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	14.25	JAN 15, 2004	13.29	APR 15, 2004	13.35	JUL 22, 2004	14.01
NOV 21	13.34	FEB 13	12.23	JUN 01	13.35	AUG 24	13.71
DEC 16	12.68	MAR 17	13.43	25	13.62		
HIGHEST 12.23 FEB 13, 2004							
LOWEST 14.25 OCT 29, 2003							



CHARLES COUNTY--Continued

WELL NUMBER.--CH Ee 70. SITE ID.--382154076574801. PERMIT NUMBER.--CH-67-0081.

LOCATION.--Lat 38°21'54", long 76°57'48", Hydrologic Unit 02070011, at the Morgantown Power Plant, 1.5 mi. north of Morgantown. Owner: Mirant.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,132 ft; casing diameter 2 in., to 1,090 ft, 1,100 to 1,105 ft, and 1,115 to 1,132 ft; screen diameter 2 in., from 1,090 to 1,100 ft, and 1,105 to 1,115 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from April 1993 to May 1995. Equipped with graphic water-level recorder from May 1982 to January 1983. Equipped with digital water-level recorder--15 and 30-minute recorder intervals from June 1978 to October 1986. Equipped with electronic water level recorder (transducer)--15-minute recorder interval from October 1986 to October 1992, and from May 1995 to current year.

DATUM.--Elevation of land surface is 22.83 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.43 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.64 ft below sea level, January 6, 1985; lowest measured, 130.24 ft below sea level, January 17, 1990.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2003	-103.00	FEB 10, 2004	-90.44	MAY 25, 2004	-85.12	SEP 14, 2004	-88.94
NOV 25	-110.98	MAR 15	-104.28	JUN 30	-101.60		
JAN 05, 2004	-103.86	APR 22	-87.72	AUG 12	-88.58		

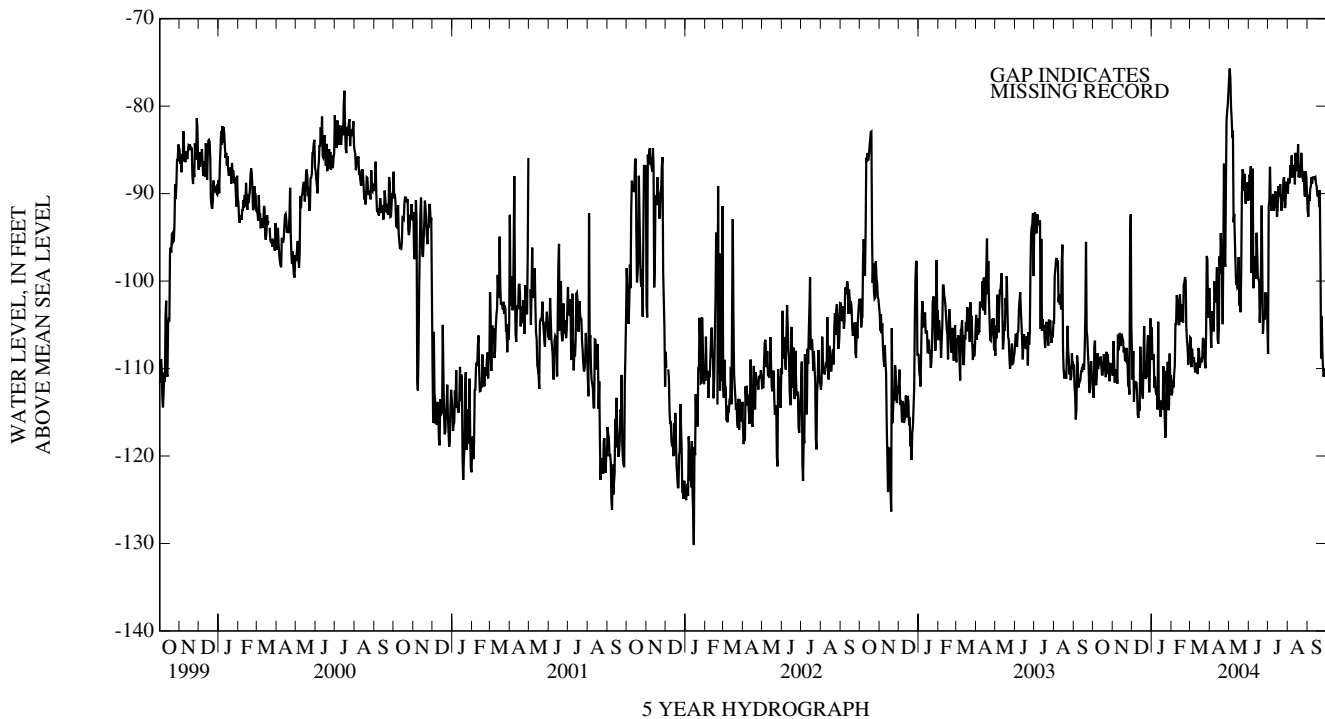
LOWEST -110.98 NOV 25, 2003
 HIGHEST -85.12 MAY 25, 2004

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-101.01	-112.57	-96.80	-110.85	-96.64	-108.20	-94.15	-105.31	-103.41	-113.06	-94.94	-106.44
2	-94.49	-113.35	-95.61	-106.85	-95.78	-111.28	-93.72	-109.01	-100.84	-112.78	-96.34	-106.54
3	-93.65	-107.54	-94.53	-109.17	-93.61	-107.99	-95.09	-108.76	-101.50	-111.34	-95.94	-109.84
4	-95.64	-106.82	-98.93	-111.60	-99.44	-113.77	-94.81	-108.34	-101.56	-112.16	-97.74	-107.74
5	-97.25	-111.68	-96.61	-110.10	-96.73	-112.00	-95.64	-112.18	-99.47	-110.58	-96.04	-108.74
6	-95.87	-111.91	-97.57	-111.26	-96.78	-111.63	-98.47	-110.94	-95.13	-109.67	-96.74	-109.24
7	-98.28	-110.64	-97.56	-110.43	-95.84	-111.55	-97.75	-112.51	-93.12	-104.91	-97.14	-108.74
8	-96.10	-108.26	-97.60	-111.73	-97.40	-111.62	-99.85	-113.00	-94.86	-104.91	-95.64	-109.84
9	-94.80	-110.07	-95.38	-106.13	-96.16	-112.89	-97.86	-112.63	-91.64	-101.63	-97.64	-110.44
10	-96.67	-108.80	-93.74	-107.90	-101.95	-115.33	-100.48	-114.68	-90.54	-102.04	-97.84	-109.74
11	-96.59	-109.49	-94.18	-107.48	-100.64	-115.64	-94.97	-104.65	-91.74	-102.64	-98.34	-109.34
12	-94.26	-109.47	-93.73	-105.92	-99.96	-114.24	-98.91	-113.79	-92.44	-104.94	-97.44	-109.74
13	-93.54	-108.63	-93.14	-107.40	-99.78	-114.81	-98.84	-113.59	-93.44	-104.94	-97.84	-110.64
14	-98.22	-109.72	-93.41	-106.18	-94.05	-107.51	-101.86	-115.16	-91.44	-101.54	-94.74	-107.64
15	-97.45	-110.70	-92.59	-106.14	-95.41	-110.52	-99.34	-115.53	-91.04	-103.14	-95.94	-108.00
16	-98.08	-110.70	-91.79	-106.53	-98.49	-111.68	-98.62	-113.96	-92.34	-104.64	-100.88	-109.92
17	-96.56	-109.58	-93.44	-106.72	-98.07	-112.66	-96.88	-113.81	-91.54	-102.64	-99.88	-109.40
18	-93.28	-108.34	-93.93	-108.15	-99.10	-113.42	-101.92	-114.69	-90.84	-103.84	-96.18	-108.79
19	-91.32	-110.16	-95.64	-107.62	-96.70	-109.22	-98.07	-109.74	-93.74	-104.74	-96.63	-109.29
20	-97.85	-109.92	-96.30	-109.02	-95.51	-105.15	-99.11	-112.79	-90.94	-100.44	-97.11	-108.77
21	-99.89	-110.99	-95.45	-109.11	-96.17	-109.93	-100.16	-114.84	-88.84	-100.14	-95.47	-106.51
22	-97.07	-108.09	-93.53	-108.40	-99.25	-111.18	-104.56	-117.92	-87.04	-99.54	-96.59	-106.66
23	-96.47	-110.64	-93.33	-107.64	-97.65	-111.03	-105.30	-117.42	-89.94	-99.94	-96.89	-108.50
24	-95.63	-108.40	-93.94	-109.38	-99.78	-110.87	-100.90	-110.26	-92.64	-105.24	-95.18	-109.20
25	-94.65	-109.56	-98.75	-111.95	-96.89	-107.46	-99.02	-112.41	-96.04	-106.74	-97.24	-109.97
26	-96.24	-110.49	-95.01	-112.05	-97.34	-106.20	-94.73	-109.23	-95.44	-107.54	-96.22	-105.77
27	-98.58	-111.45	-95.84	-112.97	-96.26	-109.82	-97.21	-114.77	-97.84	-109.54	-90.95	-97.13
28	-97.00	-109.46	-92.37	-95.84	-98.95	-112.72	-99.24	-114.23	-95.84	-108.54	-88.86	-97.51
29	-95.75	-109.47	-90.14	-92.37	-96.56	-110.19	-96.86	-108.29	-97.04	-108.04	-88.85	-103.76
30	-96.41	-109.53	-90.11	-105.45	-93.52	-104.27	-95.59	-111.96	---	---	-93.48	-104.17
31	-95.49	-110.27	---	---	-93.50	-108.08	-98.77	-110.75	---	---	-89.16	-100.79
MONTH	-91.32	-113.35	-90.11	-112.97	-93.50	-115.64	-93.72	-117.92	-87.04	-113.06	-88.85	-110.64

CHARLES COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER						
1	-86.85	-103.25	-73.48	-76.83	-85.64	-89.37	-91.54	-108.34	-86.94	-90.04	-89.64	-91.94
2	-93.98	-105.44	-73.12	-75.70	-84.48	-87.83	-88.14	-91.54	-83.94	-88.24	-89.44	-92.64
3	-91.16	-107.65	-72.07	-76.91	-85.05	-88.34	-86.24	-90.84	-86.74	-88.84	-87.74	-90.14
4	-89.45	-104.10	-76.14	-80.06	-83.52	-86.90	-84.84	-86.94	-85.34	-88.64	-86.94	-90.84
5	-90.86	-103.44	-75.78	-81.46	-86.71	-99.06	-84.84	-90.34	-85.34	-86.74	-85.54	-89.44
6	-89.21	-104.90	-79.23	-83.28	-85.14	-89.13	-87.54	-91.94	-85.64	-88.14	-85.34	-89.14
7	-89.87	-105.75	-80.52	-83.16	-84.54	-87.16	-86.34	-91.24	-83.94	-85.64	-84.34	-88.14
8	-89.09	-100.03	-79.97	-93.27	-81.73	-100.82	-87.24	-90.74	-85.34	-88.14	-86.34	-88.84
9	-89.78	-101.23	-83.04	-92.32	-85.97	-97.59	-85.84	-90.04	-82.94	-87.74	-84.44	-88.14
10	-87.24	-102.43	-83.35	-95.25	-85.36	-98.82	-86.04	-91.94	-82.94	-86.94	-85.64	-88.14
11	-89.39	-101.03	-85.10	-97.94	-83.18	-97.19	-86.94	-91.54	-82.54	-86.74	-85.34	-88.14
12	-86.42	-98.41	-86.92	-100.45	-89.55	-99.76	-86.74	-89.84	-85.34	-88.94	-84.64	-88.24
13	-94.84	-106.61	-88.35	-99.30	-83.49	-94.48	-85.34	-89.84	-81.34	-85.34	-82.94	-88.14
14	-96.60	-107.18	-87.58	-100.80	-83.32	-96.72	-87.44	-91.04	-81.34	-87.44	-86.74	-88.84
15	-87.94	-105.38	-88.75	-100.71	-89.17	-99.49	-89.44	-92.64	-81.54	-85.84	-87.44	-89.14
16	-86.53	-97.17	-87.88	-97.25	-90.48	-99.87	-86.74	-91.74	-83.24	-86.94	-86.94	-90.14
17	-84.87	-99.12	-87.28	-102.80	-88.85	-99.90	-86.24	-89.14	-81.14	-84.34	-87.44	-90.34
18	-83.68	-94.52	-88.23	-101.56	-91.87	-104.76	-87.04	-90.04	-81.14	-88.14	-86.74	-89.64
19	-82.87	-97.35	-88.83	-103.56	-92.17	-102.27	-86.04	-90.14	-82.54	-86.74	-88.24	-91.54
20	-83.57	-99.16	-89.38	-98.55	-89.94	-98.35	-85.34	-88.94	-86.34	-88.14	-86.34	-89.64
21	-87.12	-104.93	-86.09	-90.05	-87.73	-91.37	-86.34	-90.54	-83.24	-87.74	-89.64	-97.44
22	-85.28	-96.26	-83.92	-87.23	-87.73	-99.15	-87.74	-91.94	-81.84	-85.34	-97.44	-108.84
23	-81.69	-86.58	-83.49	-87.55	-85.11	-106.04	-85.84	-90.54	-82.54	-86.94	-93.34	-104.04
24	-83.95	-97.57	-85.02	-89.64	-92.72	-104.55	-86.34	-90.84	-85.34	-88.14	-90.04	-108.04
25	-82.83	-98.37	-83.96	-87.75	-90.56	-103.45	-85.64	-88.44	-84.64	-88.64	-95.74	-109.94
26	-79.03	-89.29	-86.87	-90.10	-90.00	-104.38	-85.34	-88.14	-82.94	-87.44	-99.14	-110.94
27	-77.77	-81.63	-88.12	-91.16	-87.10	-101.30	-87.44	-91.54	-86.74	-90.14	-96.54	-110.44
28	-77.09	-80.56	-87.92	-89.39	-90.13	-102.69	-87.74	-91.54	-84.44	-90.34	-96.44	-109.94
29	-76.18	-79.76	-87.66	-90.63	-88.43	-101.59	-86.04	-89.84	-84.14	-87.44	-99.14	-110.94
30	-75.06	-78.30	-86.04	-88.70	-88.22	-105.24	-86.74	-88.64	-83.64	-88.14	-96.74	-110.24
31	---	---	-86.66	-90.80	---	---	-85.84	-89.14	-86.34	-90.14	---	---
MONTH	-75.06	-107.65	-72.07	-103.56	-81.73	-106.04	-84.84	-108.34	-81.14	-90.34	-82.94	-110.94
YEAR	-72.07	-117.92										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

CHARLES COUNTY--Continued

WELL NUMBER.--CH Ee 78. SITE ID.--382240076582801. PERMIT NUMBER.--CH-73-1965.

LOCATION.--Lat 38°22'40", long 76°58'28", Hydrologic Unit 02070011, at Clifton on the Potomac, on the east side of Ingleside Road, 0.3 mi north of Clifton Drive. Owner: Charles County Department of Public Works.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, used, artesian well, depth 1,220 ft; casing diameter 7 in., to 1,148 ft, and 1,168 to 1,189 ft, and 1,199 to 1,220 ft; screen diameter 7 in., from 1,148 to 1,168 ft, and 1,189 to 1,199 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from August 1993 to June 2004.

DATUM.--Elevation of land surface is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder platform, 2.60 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--April 8, 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.87 ft below sea level, April 3, 1986; lowest measured, 90.74 ft below sea level, January 14 and 15, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

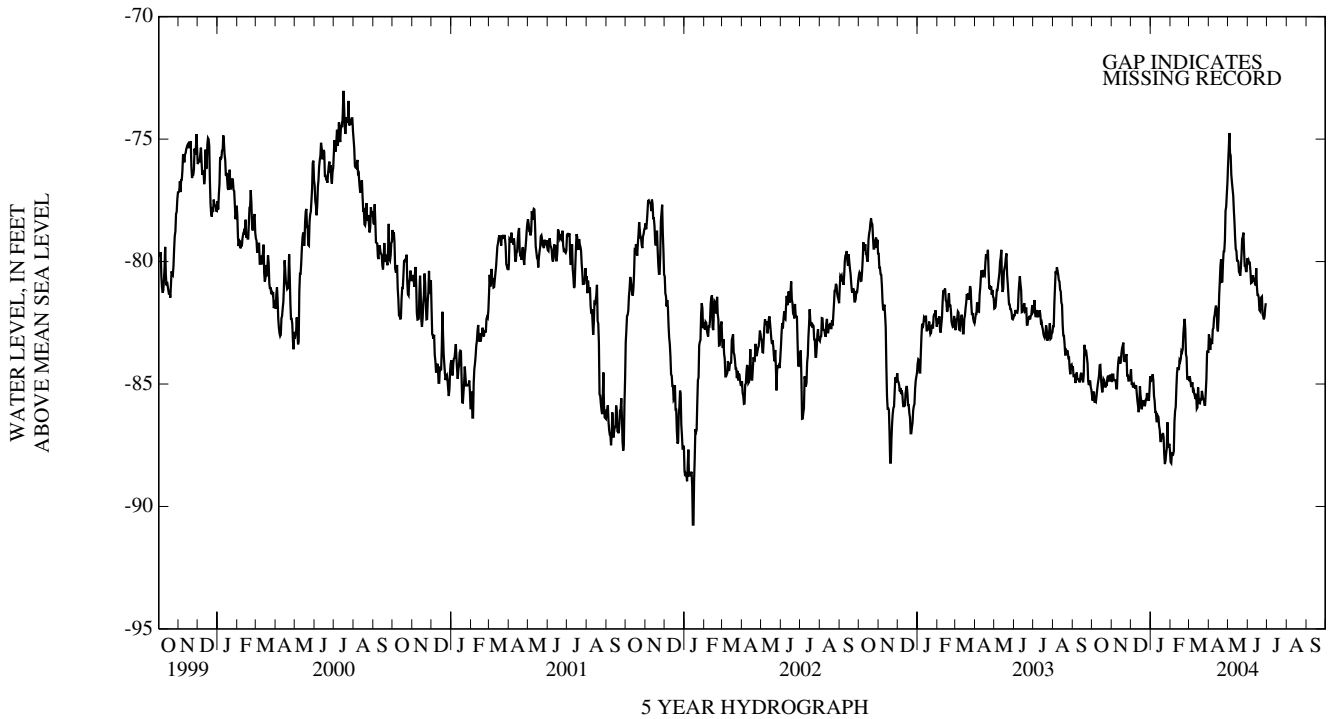
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2003	-85.06	FEB 10, 2004	-84.66	MAY 25, 2004	-78.63	SEP 14, 2004	-79.69
NOV 25	-84.44	MAR 15	-84.64	JUN 30	-81.37		
JAN 05, 2004	-84.55	APR 22	-80.34	AUG 12	-79.94		
LOWEST -85.06 OCT 22, 2003							
HIGHEST -78.63 MAY 25, 2004							

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-85.05	-85.48	-84.56	-84.92	-84.19	-84.40	-84.69	-84.92	-87.72	-88.19	-84.69	-84.88
2	-85.38	-85.68	-84.58	-84.79	-84.40	-84.98	-84.33	-84.76	-87.84	-88.23	-84.24	-84.69
3	-85.20	-85.38	-84.28	-84.58	-84.49	-84.97	-84.49	-84.73	-87.46	-87.84	-84.51	-84.87
4	-85.16	-85.31	-84.30	-84.84	-84.49	-85.11	-84.36	-84.60	-87.63	-87.85	-84.87	-85.08
5	-85.31	-85.76	-84.46	-84.84	-84.55	-85.11	-84.47	-84.87	-87.73	-87.87	-84.64	-85.07
6	-85.36	-85.70	-84.54	-84.85	-84.74	-85.03	-84.87	-85.49	-86.55	-87.74	-84.66	-84.93
7	-85.39	-85.73	-84.72	-84.85	-84.79	-85.11	-85.41	-85.69	-85.79	-86.55	-84.93	-85.27
8	-85.24	-85.50	-84.84	-85.18	-84.90	-85.19	-85.69	-86.14	-85.83	-86.10	-84.94	-85.24
9	-84.81	-85.24	-84.52	-85.18	-84.77	-85.06	-85.73	-86.14	-85.16	-85.93	-85.09	-85.40
10	-84.77	-85.01	-83.90	-84.54	-84.85	-85.39	-85.81	-86.52	-84.41	-85.16	-85.36	-85.50
11	-84.51	-84.84	-83.86	-84.12	-85.35	-85.67	-85.67	-86.52	-84.21	-84.55	-85.40	-85.61
12	-84.23	-84.64	-83.54	-83.92	-85.67	-85.90	-85.69	-86.30	-84.11	-84.32	-85.15	-85.40
13	-83.94	-84.23	-83.55	-83.92	-85.89	-86.15	-86.16	-86.35	-84.16	-84.39	-85.34	-86.01
14	-84.02	-84.22	-83.92	-84.17	-84.53	-85.95	-86.23	-86.72	-84.02	-84.39	-85.14	-85.96
15	-84.09	-84.76	-83.71	-84.08	-84.68	-85.09	-86.41	-86.87	-83.70	-84.03	-84.67	-85.14
16	-84.76	-85.11	-83.33	-83.74	-85.09	-85.49	-86.87	-87.33	-83.75	-84.08	-85.01	-85.57
17	-85.11	-85.34	-83.32	-83.53	-85.29	-85.67	-86.82	-87.33	-83.49	-83.96	-85.57	-85.78
18	-84.80	-85.14	-83.22	-83.43	-85.67	-86.03	-86.86	-87.09	-83.35	-83.65	-85.29	-85.79
19	-84.21	-84.80	-83.11	-83.31	-85.15	-85.68	-86.77	-87.09	-83.50	-83.69	-85.17	-85.59
20	-84.54	-84.85	-83.20	-84.08	-85.44	-85.84	-86.86	-87.00	-82.91	-83.57	-85.17	-85.66
21	-84.85	-84.96	-83.49	-83.98	-85.15	-85.66	-87.00	-87.16	-82.52	-82.93	-84.96	-85.28
22	-84.94	-85.14	-83.74	-84.10	-85.31	-85.87	-87.15	-87.86	-82.13	-82.61	-85.27	-85.45
23	-84.74	-84.97	-83.49	-83.87	-85.39	-85.87	-87.86	-88.27	-82.22	-82.34	-85.45	-85.62
24	-84.66	-85.08	-83.24	-83.78	-85.63	-85.65	-87.72	-88.13	-82.34	-82.77	-85.32	-85.62
25	-84.46	-84.75	-83.78	-84.65	-85.31	-85.65	-87.64	-87.84	-82.77	-83.79	-85.61	-85.85
26	-84.36	-84.66	-84.00	-84.65	-85.19	-85.37	-86.51	-87.64	-83.79	-83.91	-85.31	-85.85
27	-84.66	-84.86	-84.48	-84.86	-85.09	-85.45	-86.27	-86.56	-83.91	-84.78	-84.80	-85.33
28	-84.49	-84.86	-84.34	-84.86	-85.45	-85.54	-86.56	-87.44	-84.56	-84.78	-83.76	-84.80
29	-84.45	-84.62	-84.45	-84.82	-85.23	-85.69	-87.44	-87.59	-84.60	-84.76	-83.22	-83.76
30	-84.56	-84.74	-84.17	-84.64	-84.67	-85.23	-87.21	-87.44	---	---	-83.33	-83.63
31	-84.44	-84.69	---	---	-84.49	-84.69	-87.27	-87.72	---	---	-82.97	-83.73
MONTH	-83.94	-85.76	-83.11	-85.18	-84.19	-86.15	-84.33	-88.27	-82.13	-88.23	-82.97	-86.01

CHARLES COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-82.09	-82.97	-75.35	-76.00	-79.77	-80.04	---	---	---	---	---	---
2	-82.33	-83.17	-74.75	-75.41	-79.46	-79.96	---	---	---	---	---	---
3	-83.17	-83.61	-74.41	-74.75	-79.65	-80.07	---	---	---	---	---	---
4	-82.64	-83.21	-74.72	-75.57	-79.62	-80.06	---	---	---	---	---	---
5	-83.03	-83.23	-75.14	-75.67	-79.68	-80.41	---	---	---	---	---	---
6	-82.77	-83.37	-75.67	-76.45	-80.41	-80.88	---	---	---	---	---	---
7	-82.14	-82.77	-76.45	-76.77	-80.53	-80.86	---	---	---	---	---	---
8	-82.12	-82.72	-76.75	-77.04	-80.00	-80.64	---	---	---	---	---	---
9	-82.12	-82.30	-77.04	-77.31	-80.36	-80.56	---	---	---	---	---	---
10	-81.77	-82.18	-77.31	-77.92	-80.50	-80.82	---	---	---	---	---	---
11	-81.72	-81.94	-77.92	-78.39	-80.10	-80.67	---	---	---	---	---	---
12	-80.97	-81.80	-78.39	-79.03	-80.10	-80.90	---	---	---	---	---	---
13	-80.99	-81.92	-79.03	-79.50	-80.27	-80.97	---	---	---	---	---	---
14	-81.92	-82.68	-79.42	-79.56	-79.90	-80.27	---	---	---	---	---	---
15	-82.33	-82.85	-79.56	-79.96	-80.17	-80.98	---	---	---	---	---	---
16	-81.35	-82.33	-79.84	-79.96	-80.98	-81.36	---	---	---	---	---	---
17	-80.80	-81.38	-79.64	-80.01	-81.18	-81.36	---	---	---	---	---	---
18	-80.18	-80.80	-80.01	-80.42	-81.26	-81.47	---	---	---	---	---	---
19	-79.85	-80.18	-80.01	-80.47	-81.47	-81.98	---	---	---	---	---	---
20	-79.67	-79.91	-80.25	-80.58	-81.66	-82.02	---	---	---	---	---	---
21	-79.75	-80.83	-79.72	-80.25	-81.46	-81.66	---	---	---	---	---	---
22	-80.06	-80.82	-79.07	-79.72	-81.28	-81.46	---	---	---	---	---	---
23	-79.26	-80.06	-78.70	-79.07	-81.06	-81.43	---	---	---	---	---	---
24	-79.46	-79.59	-78.82	-79.00	-81.34	-82.16	---	---	---	---	---	---
25	-79.13	-79.58	-78.44	-78.82	-82.03	-82.24	---	---	---	---	---	---
26	-77.92	-79.13	-78.64	-79.58	-82.04	-82.36	---	---	---	---	---	---
27	-77.43	-77.92	-79.58	-80.17	-81.67	-82.26	---	---	---	---	---	---
28	-77.24	-77.76	-79.58	-80.17	-81.67	-81.92	---	---	---	---	---	---
29	-76.66	-77.24	-79.59	-80.39	-81.38	-81.70	---	---	---	---	---	---
30	-76.00	-76.74	-79.85	-80.39	---	---	---	---	---	---	---	---
31	---	---	-79.70	-79.86	---	---	---	---	---	---	---	---
MONTH	-76.00	-83.61	-74.41	-80.58	-79.46	-82.36	---	---	---	---	---	---
YEAR	-74.41	-88.27										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

DORCHESTER COUNTY

WELL NUMBER.--DO Bg 59. SITE ID.--383708075503801. PERMIT NUMBER.--DO-73-0612.

LOCATION.--Lat 38°37'08" long 75°50'38", Hydrologic Unit 02060008, at Hurlock Sewage Treatment Plant. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 537 ft; casing diameter 6 in., to 65 ft; casing diameter 2 in., from 65 to 527 ft; screen diameter 2 in., from 527 to 537 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.60 ft above land surface.

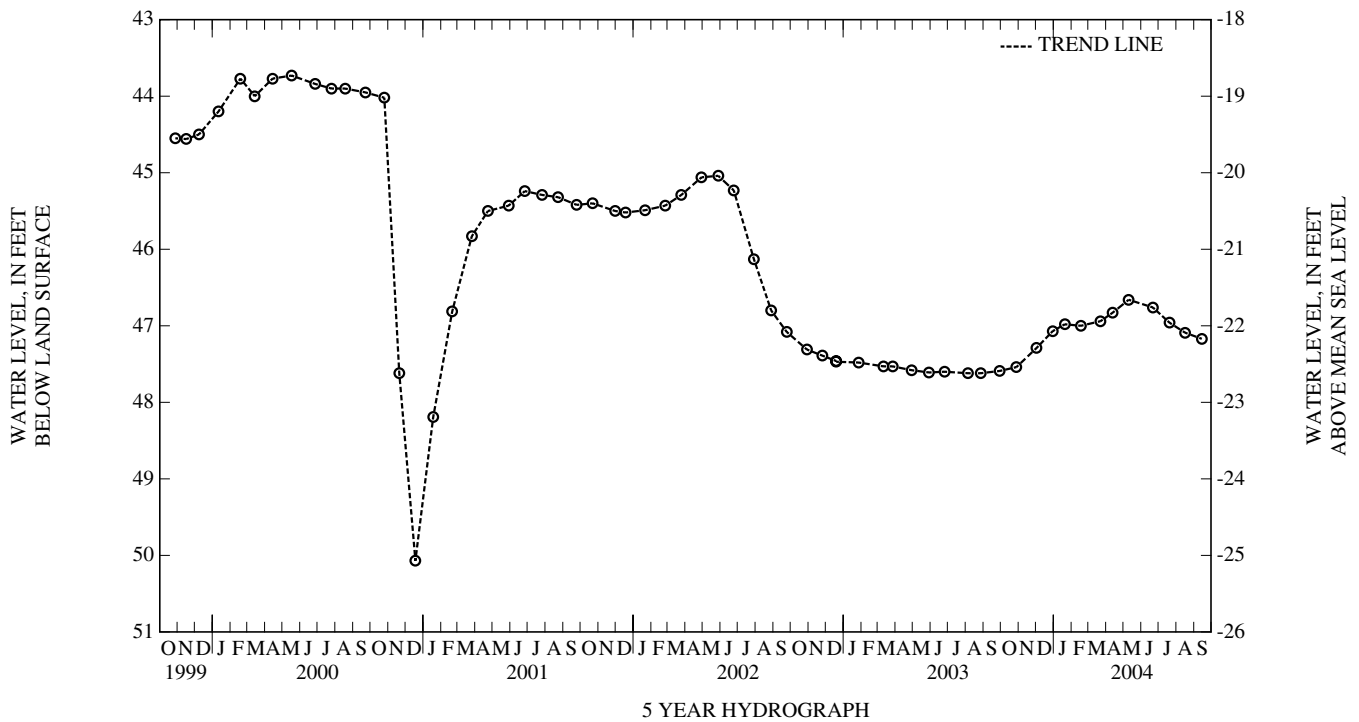
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Prior to the November 20, 2000 water-level measurement, the Hurlock Water Municipality increased their ground-water withdrawal for a 3 month period. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.79 ft below land surface, August 2, 1978; lowest measured, 47.62 ft below land surface, August 5, and 27, 2003 (See REMARKS).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	47.54	JAN 20, 2004	46.98	APR 12, 2004	46.83	JUL 20, 2004	46.96
DEC 02	47.29	FEB 17	47.00	MAY 10	46.66	AUG 16	47.09
30	47.07	MAR 22	46.94	JUN 21	46.76	SEP 14	47.17
HIGHEST 46.66 MAY 10, 2004							
LOWEST 47.54 OCT 28, 2003							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

DORCHESTER COUNTY—Continued

WELL NUMBER.--DO Cd 1. SITE ID.--383151076080801.

LOCATION.--Lat 38°31'51", long 76°08'08", Hydrologic Unit 02060005, near Christs Rock, off Pigs Neck Rd. Owner: Private Residence.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 390 ft; casing diameter 2 in., to unknown depth.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.35 ft above land surface.

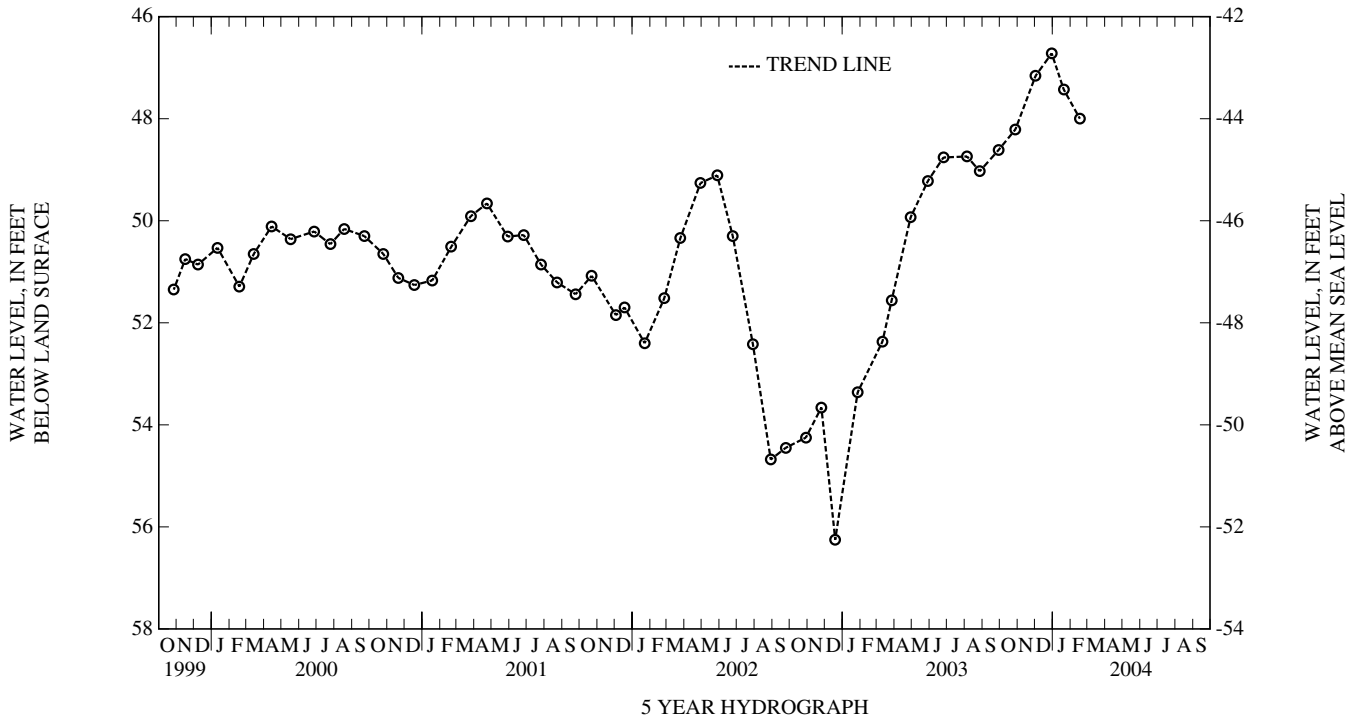
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1966 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.07 ft below land surface, October 2, 1990; lowest measured, 80.32 ft below land surface, October 16, 1970.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	48.21	DEC 30, 2003	46.72	FEB 17, 2004	48.00
DEC 02	47.16	JAN 20, 2004	47.43		
HIGHEST 46.72 DEC 30, 2003					
LOWEST 48.21 OCT 28, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

DORCHESTER COUNTY—Continued

WELL NUMBER.--DO Ce 5. SITE ID.--383340076041601.

LOCATION.--Lat 38°33'40", long 76°04'16", Hydrologic Unit 02060005, at Cambridge Pumping Station, off Lake St. Owner: Municipal Utilities Commission.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 405 ft; casing diameter 2 in., to land surface; casing diameter 12 in., from 0 to 385 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 4.00 ft above land surface.

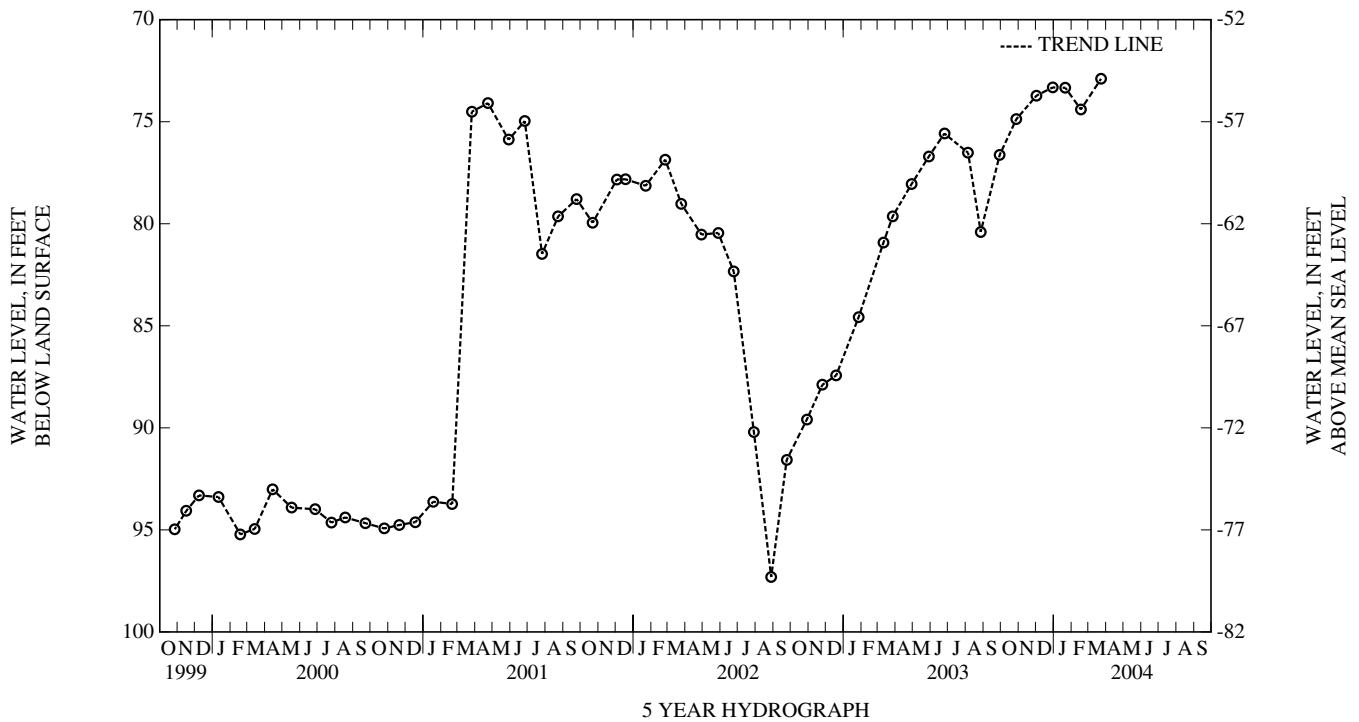
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. The drop in water levels in July of 1999 is the result of using the municipal production well at Lake Street, just prior to March of 2001. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1977 to March 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 66.23 ft below land surface, May 1, 1990; lowest measured, 115.06 ft below land surface, August 29, 1978.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	74.87	DEC 30, 2003	73.32	FEB 17, 2004	74.40
DEC 02	73.72	JAN 21, 2004	73.34	MAR 23	72.90
HIGHEST 72.90 MAR 23, 2004					
LOWEST 74.87 OCT 28, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

DORCHESTER COUNTY--Continued

WELL LOCATION.--DO Ce 15. SITE ID.--383408076042402. PERMIT NUMBER.--DO-00-1220.

LOCATION.--Lat 38°34'08", long 76°04'23", Hydrologic Unit 02060005, near Cambridge Creek, near Trenton St., Cambridge. Owner: Carroll W. Thomas & Sons., Inc.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 970.5 ft; casing diameter 10 in., to 25 ft.; casing diameter 8 in., from +1.5 to 236.5 ft; casing diameter 6 in., from 230 to 513.5 ft; casing diameter 4 in., from 468 to 911.5 ft; casing diameter 3 in., from 902.3 to 950.5 ft; screen diameter 3 in., from 950.5 to 970.5 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.50 ft above land surface.

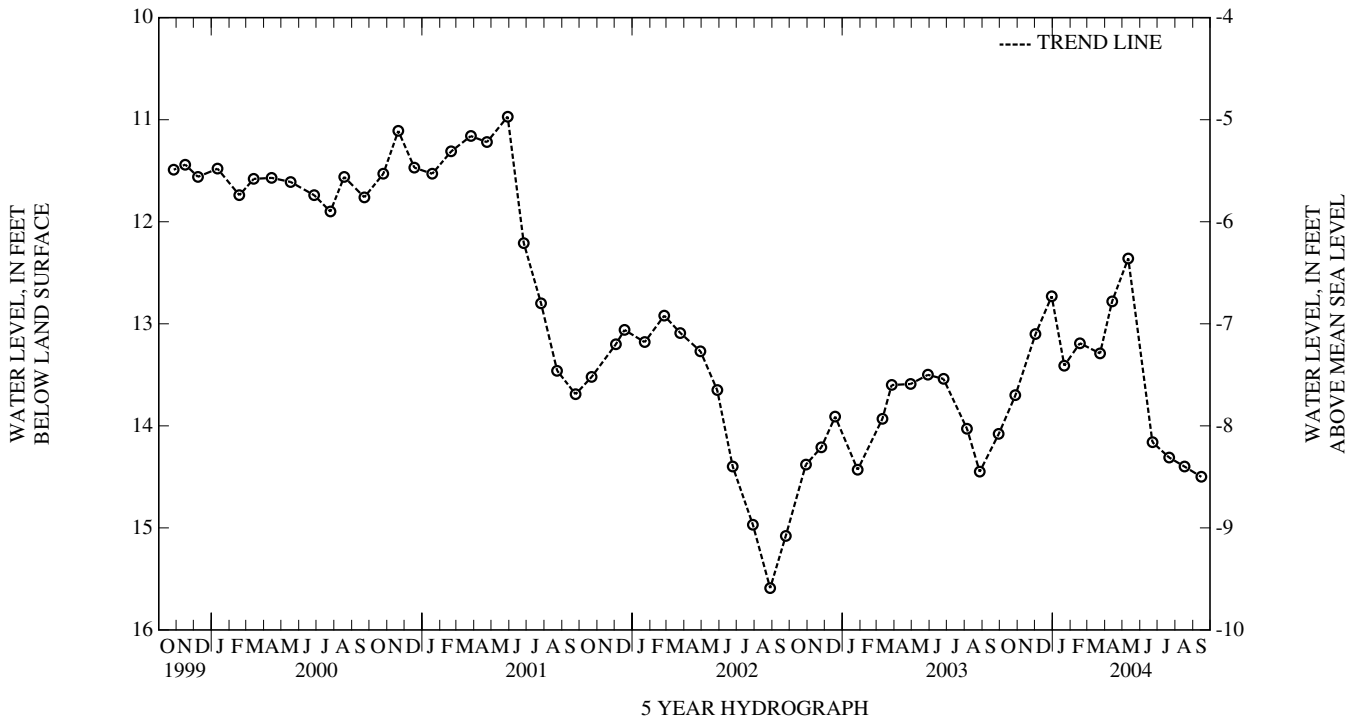
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level reported 68 ft below land surface Aug. 30, 1947. The drop in water level in June 2001 is the result of increased ground-water withdrawal by Municipal Utilities. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--June 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.41 ft below land surface, March 1, 1960; lowest measured, 41.12 ft below land surface, August 7, 1959.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	13.70	JAN 21, 2004	13.41	APR 13, 2004	12.78	JUL 21, 2004	14.31
DEC 02	13.10	FEB 17	13.19	MAY 11	12.36	AUG 17	14.40
30	12.73	MAR 23	13.29	JUN 22	14.16	SEP 15	14.50
HIGHEST 12.36		MAY 11, 2004					
LOWEST 14.50		SEP 15, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Ce 85. SITE ID.--383256076035301. PERMIT NUMBER.--DO-73-0281.

LOCATION.--Lat 38°32'56", long 76°03'53", Hydrologic Unit 02060005, at Woods Rd. water tower, Cambridge. Owner: U.S. Geological Survey.

AQUIFER.--Cheswold aquifer in the Calvert Formation of lower middle Miocene age. Aquifer code: 122CSLD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 230 ft; casing diameter 4 in., to 220 ft; screen diameter 4 in., from 220 to 230 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.10 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Reported incorrectly as DO Ce 78 in this series of reports, prior to the 1997 Water Year, Water Resources Data report. Water levels are affected by local ground-water withdrawal.

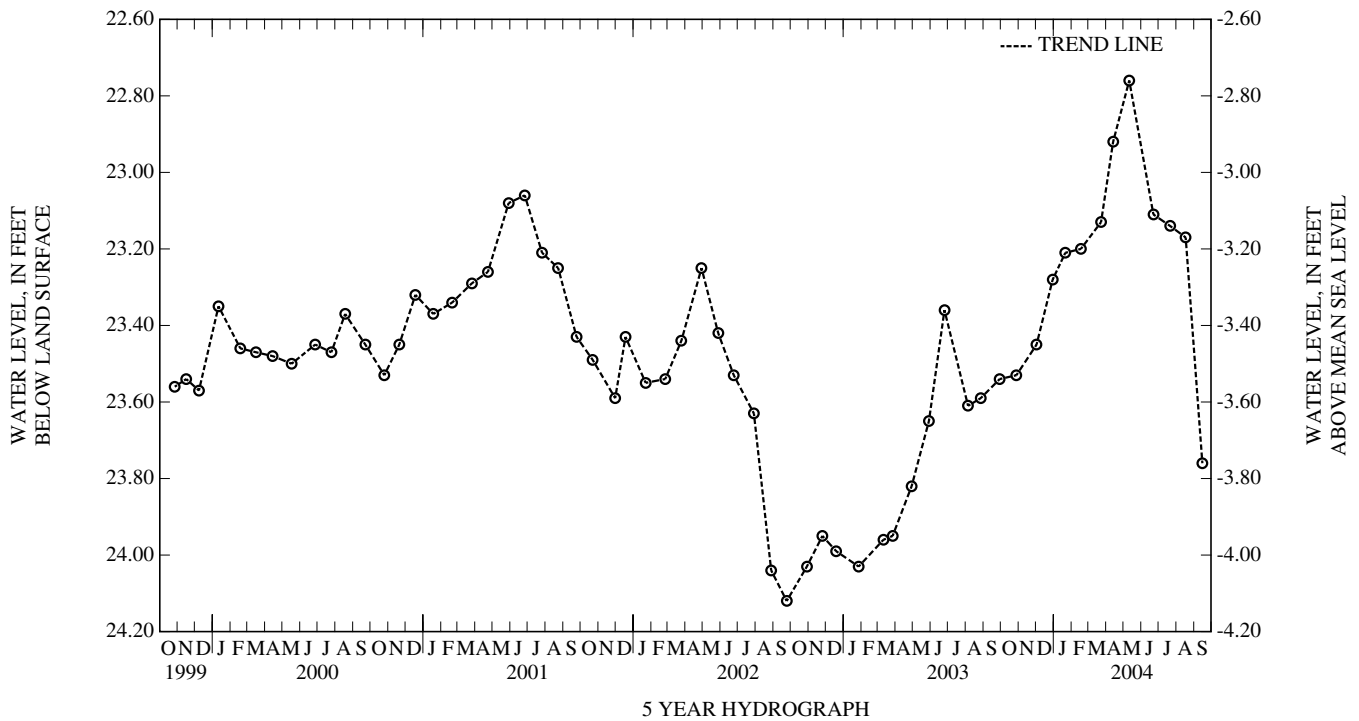
PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.74 ft below land surface, June 3, 1993; lowest measured, 26.76 ft below land surface, September 10, 1974.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	23.53	JAN 21, 2004	23.21	APR 13, 2004	22.92	JUL 21, 2004	23.14
DEC 02	23.45	FEB 17	23.20	MAY 11	22.76	AUG 17	23.17
30	23.28	MAR 23	23.13	JUN 22	23.11	SEP 15	23.76

HIGHEST 22.76 MAY 11, 2004
 LOWEST 23.76 SEP 15, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Db 17. SITE ID.--382800076180701. PERMIT NUMBER.--DO-73-0557.

LOCATION.--Lat 38°28'00", long 76°18'07", Hydrologic Unit 02060005, off MD Rt. 16, near Old Taylors Island School, Taylor Island. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 320 ft; casing diameter 6 in., to 55 ft; casing diameter 2 in., from 55 to 270 ft; screen diameter 2 in., from 270 to 280 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.65 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

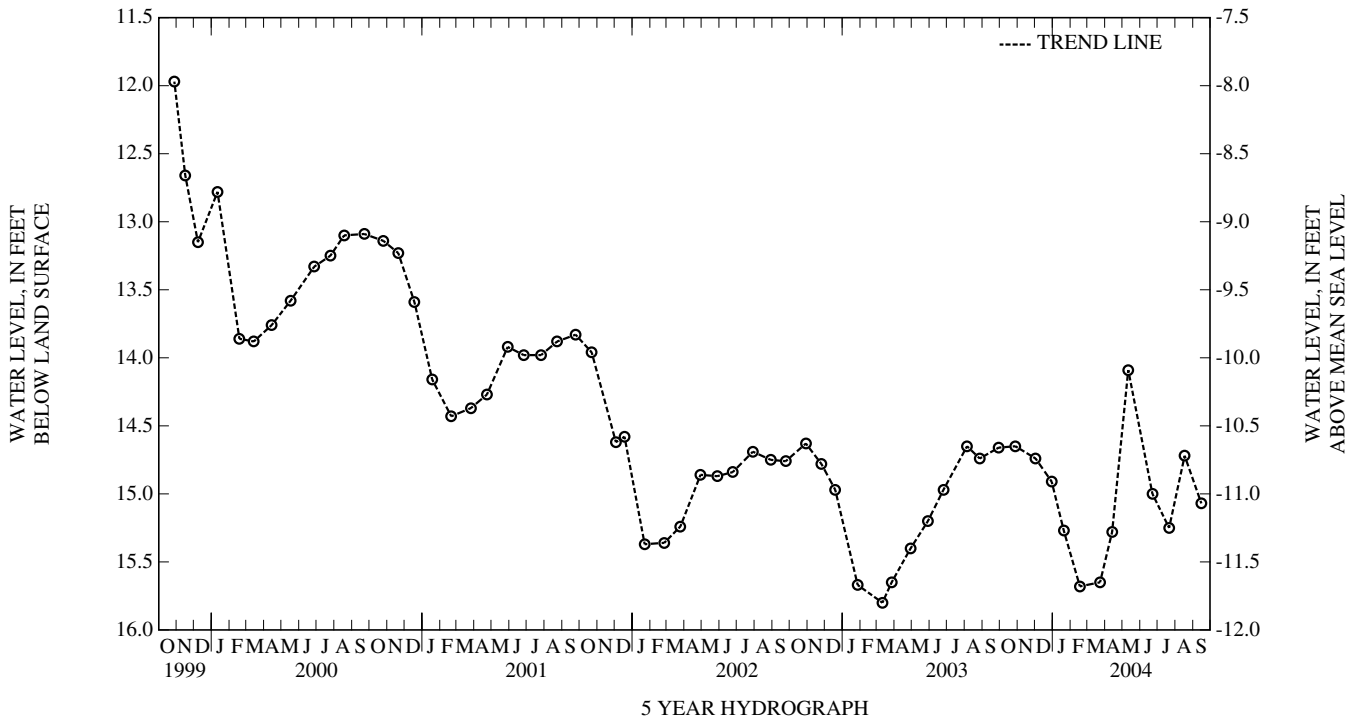
PERIOD OF RECORD.--April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.77 ft below land surface, October 4, 1979; lowest measured, 15.80 ft below land surface, March 11, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	14.65	JAN 20, 2004	15.27	APR 13, 2004	15.28	JUL 21, 2004	15.25
DEC 02	14.74	FEB 17	15.68	MAY 11	14.09	AUG 17	14.72
30	14.91	MAR 23	15.65	JUN 22	15.00	SEP 15	15.07

HIGHEST 14.09 MAY 11, 2004
 LOWEST 15.68 FEB 17, 2004



DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Db 19. SITE ID.--382847076190901. PERMIT NUMBER.--DO-81-1164.

LOCATION.--Lat 38°28'47", long 76°19'09", Hydrologic Unit 02060005, Taylors Island, off Bay Shore Road. Owner: Private Residence.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, depth 540 ft; casing diameter 4 in., to 140 ft; casing diameter 2 in., from 140 to 520 ft; screen diameter 2 in., from 520 to 540 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 1.5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.50 ft above land surface.

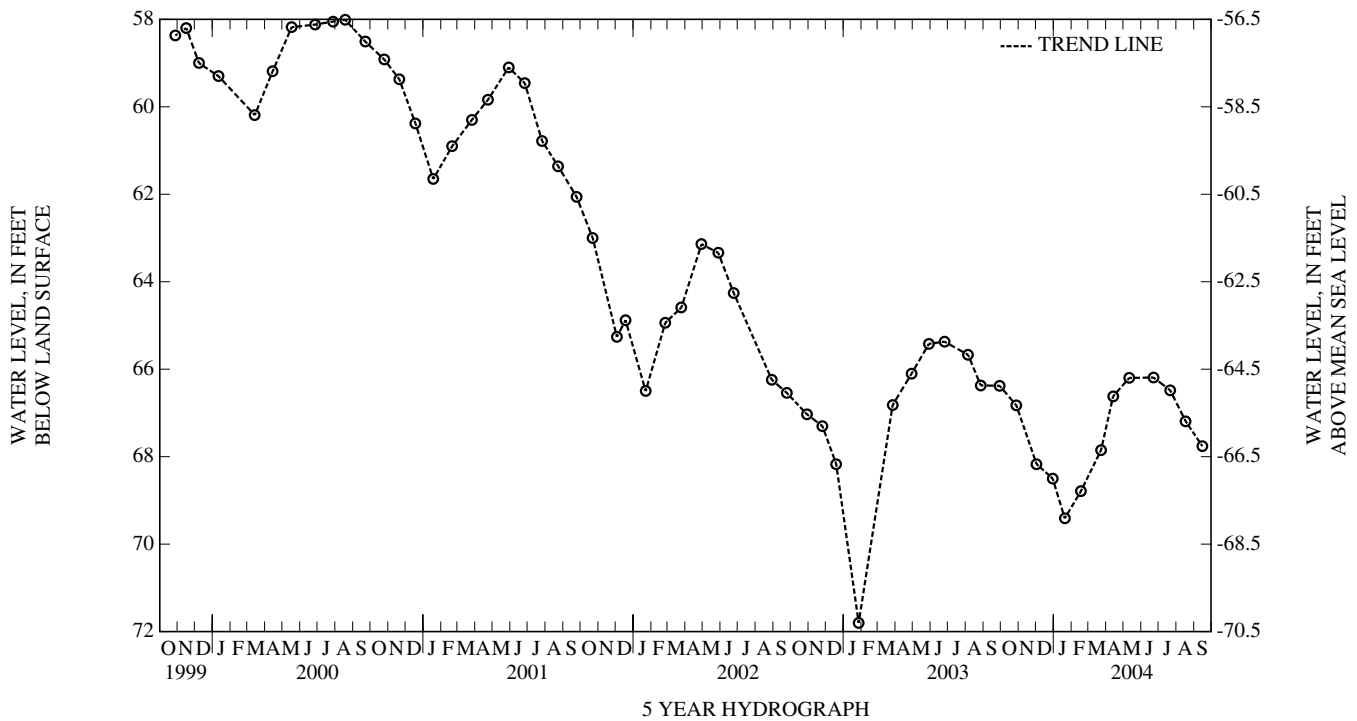
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water-levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--November 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.50 ft below land surface, August 2, 1989; lowest measured, 71.80 ft below land surface, January 27, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	66.83	JAN 20, 2004	69.41	APR 13, 2004	66.62	JUL 21, 2004	66.48
DEC 02	68.17	FEB 17	68.79	MAY 11	66.20	AUG 17	67.19
30	68.50	MAR 23	67.85	JUN 22	66.19	SEP 15	67.76
HIGHEST 66.19 JUN 22, 2004							
LOWEST 69.41 JAN 20, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Dh 27. SITE ID.--382916075491702. PERMIT NUMBER.--DO-71-0001.

LOCATION.--Lat 38°29'16", long 75°49'17", Hydrologic Unit 02060008, Vienna power plant. Owner: Vienna Power LLC.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 63 ft; casing diameter 12 in., to 20 ft; casing diameter 8 in., to 33 ft; screen diameter 6 in., from 33 to 63 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval from May 1990 to June 2004. Twice yearly water-level measurements from September 2004 to current year.

DATUM.--Elevation of land surface is 9.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.69 ft above land surface.

REMARKS.-- Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal at the Vienna power plant. The April 1, 1997 low water level is due to an extended period of pumping to fill the storage tank, which was drained for maintenance. Missing data due to recorder malfunction.

PERIOD OF RECORD.--April 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.94 ft above sea level, September 19, 2003 (recorder) (See REMARKS); lowest measured, 11.45 ft below sea level, December 4, 2002 (recorder).

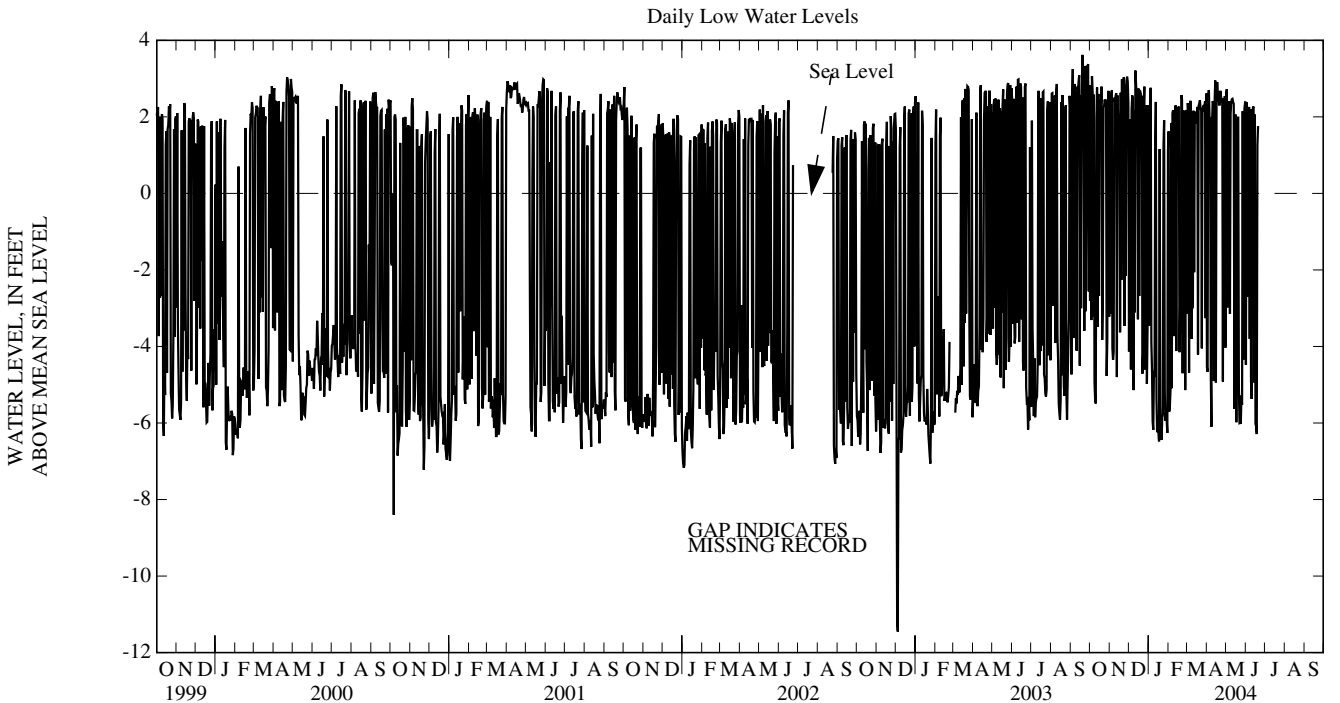
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	2.59	JAN 20, 2004	-5.87	APR 12, 2004	2.51	SEP 14, 2004	-4.47
DEC 02	2.12	FEB 17	2.62	MAY 10	2.95		
31	2.61	MAR 22	2.45	JUN 21	2.46		
LOWEST	-5.87	JAN 20, 2004					
HIGHEST	2.95	MAY 10, 2004					

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3.19	-2.80	3.04	2.60	2.70	-4.13	2.90	2.28	2.02	1.62	2.64	-3.15
2	3.12	2.64	3.04	2.58	2.38	1.94	2.64	-3.46	2.07	-5.70	2.75	2.36
3	3.15	-3.31	3.03	-3.13	2.43	1.81	3.09	2.56	2.01	-5.55	2.57	2.06
4	3.50	3.06	3.11	2.69	2.54	-4.60	3.20	2.76	2.30	-5.12	2.46	-4.68
5	3.31	2.63	3.08	-4.04	2.76	2.17	3.04	-3.88	2.39	1.84	2.67	1.97
6	3.10	-3.23	3.28	-4.35	3.12	2.56	2.75	-4.59	2.39	-5.09	2.97	2.42
7	3.07	2.58	2.86	-4.16	2.84	2.47	2.48	-5.96	2.79	2.09	2.69	2.14
8	3.13	-4.93	3.01	2.50	2.83	-5.14	1.83	-6.18	2.74	2.17	2.62	-3.80
9	2.59	-5.39	2.94	2.39	3.26	2.16	2.15	-4.70	2.66	-3.73	2.79	2.01
10	2.46	-5.49	3.06	2.55	3.31	-3.11	2.21	-4.72	2.55	2.10	2.88	-3.00
11	3.00	1.93	3.25	2.62	3.97	3.21	2.65	1.24	2.72	2.16	2.99	2.16
12	3.45	2.77	3.28	-4.80	3.71	2.86	2.88	2.39	2.80	2.30	3.29	-2.06
13	3.37	-3.49	3.14	2.56	2.99	2.53	2.49	-5.35	2.86	-4.12	2.75	2.13
14	3.37	2.60	2.81	1.96	3.74	2.57	1.98	-6.24	2.78	2.25	2.44	1.82
15	3.62	-2.68	2.42	1.89	3.73	-3.29	2.02	-5.80	2.64	2.17	2.66	2.13
16	2.83	2.45	2.86	2.06	3.13	2.74	1.76	-6.20	2.73	2.21	2.51	2.06
17	2.69	2.19	2.91	-3.63	3.08	-2.68	1.24	-6.48	2.79	2.27	2.82	2.26
18	2.96	2.23	3.32	2.63	3.18	2.70	2.38	1.16	2.60	-4.15	2.98	-4.21
19	3.20	2.79	3.77	-2.26	3.19	2.64	2.32	-5.54	2.81	-2.99	2.96	2.29
20	3.11	-3.83	3.80	2.98	3.08	2.56	1.99	-6.24	2.94	-3.65	3.17	2.35
21	3.24	-2.77	3.44	-1.87	3.14	2.53	1.40	-6.44	3.12	2.57	3.35	2.43
22	2.86	2.24	3.46	2.90	3.26	-4.71	1.72	-5.86	2.98	2.46	2.62	2.21
23	2.84	2.29	3.63	3.04	2.56	-4.20	1.94	-5.78	2.73	-4.70	2.76	2.18
24	2.93	2.45	3.60	-3.46	3.29	2.26	2.25	1.27	2.85	2.17	2.90	-4.05
25	2.92	2.34	3.46	2.86	3.35	2.79	2.26	1.91	2.64	2.07	2.59	2.14
26	3.09	2.45	3.40	-2.15	3.15	-4.60	2.26	-5.18	2.67	2.07	2.73	2.28
27	2.99	-4.77	3.46	2.93	2.69	2.20	2.10	-5.94	2.61	-5.14	2.75	2.29
28	2.72	-3.84	3.70	3.05	3.12	2.30	2.18	-5.72	2.54	2.09	2.58	2.13
29	3.15	2.38	3.64	2.93	3.14	-4.98	1.70	-5.93	2.61	2.18	3.03	2.41
30	3.11	2.68	2.95	2.36	2.80	-3.53	1.53	-6.26	---	---	3.05	-3.26
31	3.00	-3.22	---	---	2.90	2.28	1.71	1.15	---	---	3.04	2.61
MONTH	3.62	-5.49	3.80	-4.80	3.97	-5.14	3.20	-6.48	3.12	-5.70	3.35	-4.68

DORCHESTER COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.07	-4.54	2.90	2.54	2.87	-4.48	---	---	---	---	---	---
2	2.87	-4.66	3.13	2.72	2.83	2.38	---	---	---	---	---	---
3	3.03	2.52	3.36	-2.98	2.89	2.17	---	---	---	---	---	---
4	3.29	2.70	2.79	2.23	2.73	-2.70	---	---	---	---	---	---
5	2.91	2.00	2.93	2.32	2.76	1.96	---	---	---	---	---	---
6	2.49	1.97	2.94	2.41	2.80	2.26	---	---	---	---	---	---
7	2.70	-4.68	3.02	-3.15	2.66	-3.80	---	---	---	---	---	---
8	2.37	-6.10	2.71	2.08	2.68	2.20	---	---	---	---	---	---
9	2.77	1.85	2.96	2.38	2.55	-4.90	---	---	---	---	---	---
10	2.89	2.41	2.94	2.46	2.25	-5.37	---	---	---	---	---	---
11	2.89	2.34	2.92	2.47	2.40	1.74	---	---	---	---	---	---
12	2.60	-4.90	2.82	2.38	2.59	2.24	---	---	---	---	---	---
13	3.38	2.39	2.78	2.34	2.72	2.27	---	---	---	---	---	---
14	3.44	2.95	2.77	-5.63	2.78	-4.94	---	---	---	---	---	---
15	3.12	-4.94	2.58	1.76	2.58	2.06	---	---	---	---	---	---
16	3.06	2.36	2.66	2.06	2.51	-6.02	---	---	---	---	---	---
17	3.39	2.91	2.52	-5.98	2.15	-6.09	---	---	---	---	---	---
18	3.39	2.60	2.60	1.58	2.13	-6.29	---	---	---	---	---	---
19	3.11	2.62	2.73	1.98	2.10	1.25	---	---	---	---	---	---
20	3.10	2.32	2.46	1.98	2.25	1.76	---	---	---	---	---	---
21	2.89	2.32	2.68	-5.09	---	---	---	---	---	---	---	---
22	3.22	2.68	2.53	-6.00	---	---	---	---	---	---	---	---
23	3.11	2.54	2.18	-5.99	---	---	---	---	---	---	---	---
24	2.82	2.38	2.11	-6.02	---	---	---	---	---	---	---	---
25	2.89	2.48	2.00	-5.28	---	---	---	---	---	---	---	---
26	2.99	-4.92	2.17	-5.52	---	---	---	---	---	---	---	---
27	2.86	2.24	2.70	2.15	---	---	---	---	---	---	---	---
28	2.86	2.23	2.72	-4.34	---	---	---	---	---	---	---	---
29	2.97	2.54	2.60	2.02	---	---	---	---	---	---	---	---
30	3.02	-4.03	2.74	2.27	---	---	---	---	---	---	---	---
31	---	---	2.88	2.40	---	---	---	---	---	---	---	---
MONTH	3.44	-6.10	3.36	-6.02	2.89	-6.29	---	---	---	---	---	---
YEAR	3.97	-6.48										



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

FREDERICK COUNTY

WELL NUMBER.--FR Af 27. SITE ID.--394200077190701. PERMIT NUMBER.--FR-73-7155.

LOCATION.--Lat 39°42'00", long 77°19'07", Hydrologic Unit 02070009, 0.3 mi southwest of U.S. Rt. 15 and MD Rt. 140, Emmitsburg. Owner: City of Emmitsburg.

AQUIFER.--Gettysburg Shale of Upper Triassic age. Aquifer code: 231GBRG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 365 ft; casing diameter 6 in., to 41 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 385 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.81 ft above land surface.

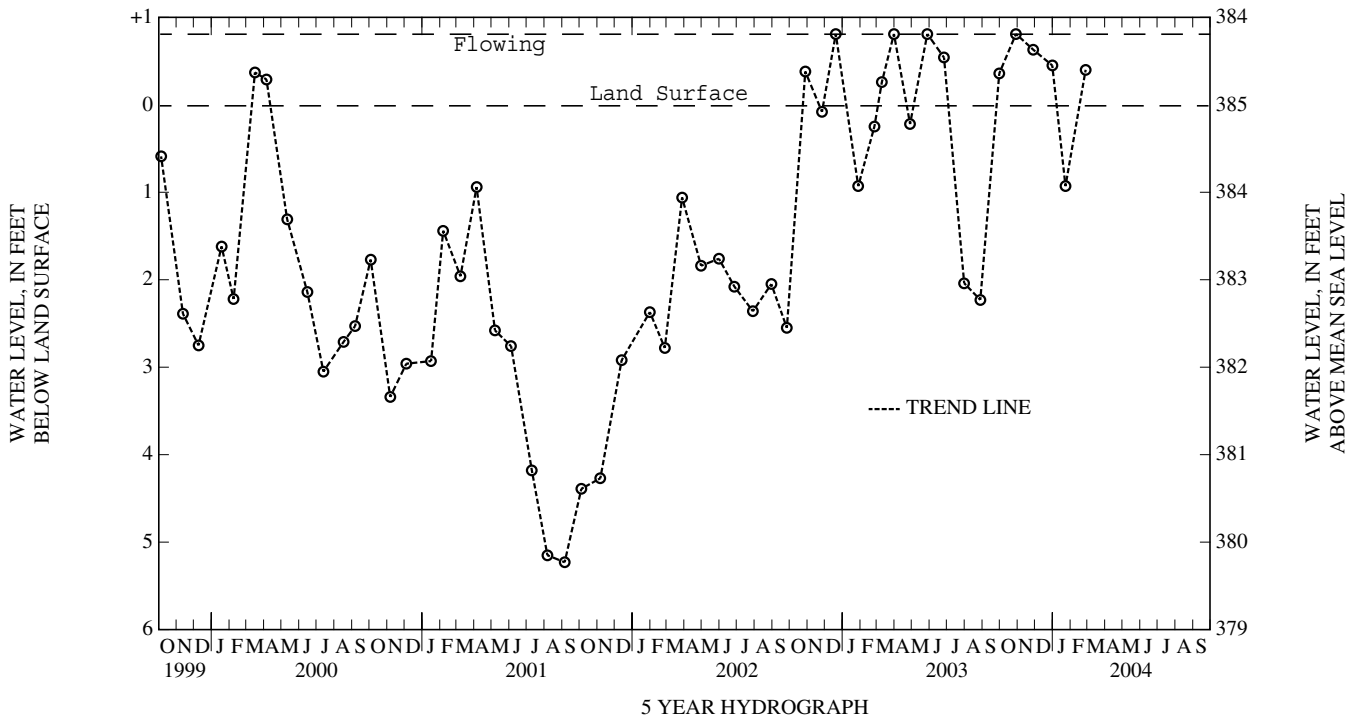
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--April 1982 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, flowing on Dec. 20, 2002, March 31, 2003, May, 28, 2003; lowest measured, 5.90 ft below land surface, July 16, 1999, and August 12, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	Flowing	DEC 31, 2003	+45	FEB 27, 2004	+40
NOV 28	+63	JAN 23, 2004	.93		
HIGHEST	+63	NOV 28, 2003			
LOWEST	.93	JAN 23, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

FREDERICK COUNTY—Continued

WELL NUMBER.--FR Bd 96. SITE ID.--393733077274801.

LOCATION.--Lat 39°37'33", long 77°27'48", Hydrologic Unit 02070009, 0.4 mi west of Hunting Creek Lake, Cunningham Falls State Park. Owner: State of Maryland.

AQUIFER.--Catoclin Metabasalt of Precambrian age. Aquifer code: 400CTCN.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 189 ft; casing diameter 6 in., to 22 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder April 1982 to February 1984. Equipped with a digital water-level recorder--15-minute recorder interval from June 1991 to May 1993.

DATUM--Elevation of land surface is 1,150 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface previous to July 2003, when the casing was extended for an instrumentation shelter. Current measuring point is 3.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--April 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.54 ft below land surface, May 11, 1989; lowest measured, 47.21 ft below land surface, December 16, 1998.

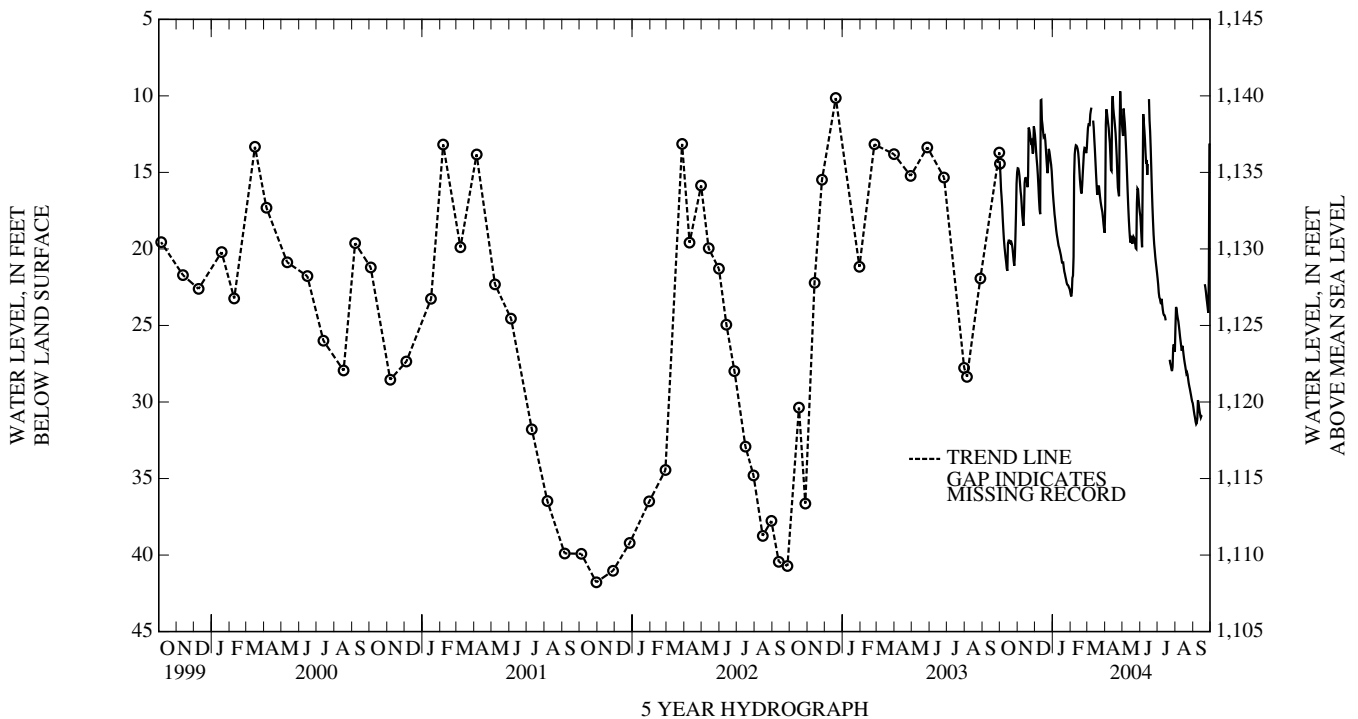
WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	17.60	JAN 23, 2004	21.85	APR 15, 2004	10.83	JUL 21, 2004	27.00
DEC 31	15.66	FEB 27	13.57	27	9.95	SEP 20	22.09
HIGHEST	9.95	APR 27, 2004					
LOWEST	27.00	JUL 21, 2004					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	14.76	14.14	14.80	14.69	12.81	12.32	16.57	15.90	23.06	22.86	13.02	12.38
2	15.69	14.76	14.80	14.71	13.38	12.81	17.05	16.57	23.13	23.06	12.38	11.89
3	16.49	15.69	15.03	14.80	13.93	13.38	17.51	17.05	23.13	22.15	11.90	11.86
4	16.86	16.49	15.46	15.03	14.39	13.93	17.93	17.51	22.15	21.78	11.95	11.84
5	17.68	16.86	15.99	15.46	14.87	14.39	18.22	17.93	21.78	21.71	11.97	11.85
6	18.41	17.68	16.40	15.99	15.57	14.87	18.66	18.22	21.71	17.59	11.96	10.90
7	19.09	18.41	16.87	16.32	16.37	15.57	18.97	18.66	17.59	14.10	11.08	10.75
8	19.63	19.09	17.54	16.87	17.12	16.37	19.21	18.97	14.10	13.60	10.89	10.71
9	20.06	19.63	18.03	17.54	17.69	17.12	19.44	19.21	13.60	13.32	---	---
10	20.43	20.06	18.35	18.03	17.88	16.93	19.70	19.44	13.32	13.15	---	---
11	20.76	20.43	18.62	18.35	16.93	9.29	19.85	19.70	13.32	13.15	11.75	11.48
12	21.12	20.76	18.62	16.14	11.16	9.34	20.01	19.85	13.34	13.30	12.43	11.75
13	21.48	21.12	16.14	15.48	11.83	11.16	20.17	20.01	13.53	13.33	13.15	12.43
14	21.53	20.51	15.48	15.32	12.01	11.83	20.28	20.17	13.85	13.53	13.80	13.15
15	20.51	19.49	15.40	15.33	12.53	12.01	20.54	20.28	14.43	13.85	14.74	13.80
16	19.55	19.48	15.48	15.40	12.75	12.53	20.80	20.54	15.12	14.43	15.39	14.74
17	19.57	19.52	15.78	15.48	12.75	12.46	20.96	20.79	15.71	15.12	16.11	15.39
18	19.52	19.44	16.09	15.78	12.72	12.46	20.99	20.80	16.08	15.71	16.69	16.11
19	19.58	19.44	16.12	12.32	13.18	12.72	21.08	20.78	16.39	16.08	16.62	16.26
20	19.64	19.58	12.32	12.03	13.89	13.18	21.38	21.08	16.47	16.13	16.26	15.85
21	19.62	19.52	12.30	12.09	14.41	13.89	21.58	21.38	16.13	15.42	16.02	15.77
22	19.82	19.62	12.58	12.30	14.96	14.41	21.77	21.58	15.42	14.73	16.43	16.02
23	20.16	19.82	12.94	12.58	15.09	14.96	21.93	21.76	14.73	13.99	16.78	16.43
24	20.61	20.16	13.14	12.89	15.03	13.60	22.12	21.93	13.99	13.46	17.05	16.78
25	20.97	20.61	13.04	12.88	13.60	13.41	22.29	22.12	13.46	13.37	17.27	17.05
26	21.23	20.97	13.54	13.04	13.75	13.51	22.37	22.29	13.45	13.38	17.46	17.27
27	21.24	19.63	13.99	13.54	14.07	13.75	22.38	22.33	13.66	13.45	17.75	17.46
28	19.63	18.95	14.09	12.07	14.34	14.07	22.46	22.35	13.83	13.64	18.16	17.75
29	18.95	16.42	12.14	11.85	14.63	14.34	22.57	22.46	13.64	13.02	18.56	18.16
30	16.42	15.25	12.32	12.14	15.27	14.63	22.66	22.56	---	---	18.88	18.56
31	15.25	14.80	---	---	15.90	15.27	22.86	22.66	---	---	19.04	18.88
MONTH	21.53	14.14	18.62	11.85	17.88	9.29	22.86	15.90	23.13	13.02	19.04	10.71

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.04	13.34	12.66	12.03	18.15	17.65	22.11	21.77	26.66	23.92	30.50	30.21
2	13.34	10.95	13.03	10.94	18.89	18.15	22.68	22.11	23.92	23.73	30.76	30.50
3	10.95	10.85	11.09	10.67	19.60	18.89	23.04	22.68	24.11	23.82	30.95	30.76
4	11.28	10.93	11.54	11.09	20.15	19.60	23.20	23.04	24.42	24.11	31.18	30.95
5	11.64	11.28	12.09	11.54	20.18	11.07	23.36	23.20	24.68	24.42	31.42	31.18
6	11.94	11.64	12.83	12.09	11.43	11.04	23.59	23.36	24.89	24.64	31.46	31.42
7	12.38	11.94	13.72	12.83	11.97	11.43	23.72	23.30	25.22	24.89	31.43	31.33
8	12.86	12.38	14.77	13.72	12.51	11.97	23.42	23.19	25.58	25.22	31.36	30.29
9	13.45	12.79	15.78	14.77	13.29	12.51	23.83	23.42	25.94	25.58	30.29	29.81
10	14.36	13.45	16.81	15.78	14.14	13.29	24.12	23.83	26.26	25.94	30.22	29.84
11	15.27	14.36	17.70	16.81	14.59	14.12	24.29	24.12	26.57	26.26	30.52	30.22
12	15.69	11.38	18.45	17.70	14.60	14.03	24.34	24.29	26.73	26.57	30.75	30.52
13	11.38	9.55	19.09	18.45	15.75	14.60	24.42	24.28	26.67	26.25	31.00	30.75
14	10.44	9.55	19.46	19.09	16.47	9.94	24.54	24.42	26.73	26.39	31.04	31.00
15	11.05	10.44	19.76	19.35	---	---	24.73	24.54	27.10	26.73	31.04	30.85
16	11.39	11.05	19.35	19.08	11.29	9.08	---	---	27.35	27.10	30.92	30.85
17	11.77	11.39	19.57	19.24	11.95	11.29	---	---	27.58	27.35	---	---
18	12.21	11.77	19.77	19.57	12.86	11.95	---	---	27.83	27.58	---	---
19	12.77	12.21	19.67	19.20	14.01	12.86	---	---	28.03	27.83	---	---
20	13.56	12.77	19.22	19.18	15.46	14.01	---	---	28.28	28.03	---	---
21	14.50	13.56	19.34	19.20	16.71	15.46	---	---	28.17	28.04	22.43	22.22
22	15.61	14.50	19.53	19.33	17.74	16.71	27.37	27.10	28.38	28.09	22.69	22.43
23	16.32	15.61	19.80	19.53	18.65	17.74	27.54	27.37	28.67	28.38	23.04	22.69
24	16.58	16.02	20.15	19.80	19.41	18.65	27.74	27.53	28.91	28.67	23.39	23.04
25	16.75	16.25	20.40	18.35	19.90	19.41	27.94	27.74	29.06	28.91	23.69	23.39
26	16.25	9.02	18.35	16.26	20.34	19.90	28.01	27.94	29.26	29.06	24.05	23.69
27	10.46	8.99	16.26	15.98	20.74	20.34	28.03	26.83	29.47	29.26	24.32	24.05
28	11.16	10.46	16.40	15.99	21.10	20.74	26.83	26.26	29.70	29.47	24.32	14.90
29	11.58	11.16	16.98	16.40	21.40	21.10	26.33	26.20	29.92	29.70	14.90	12.94
30	12.03	11.58	17.45	16.98	21.77	21.40	26.59	26.33	30.04	29.92	13.32	12.98
31	---	---	17.65	17.45	---	---	26.86	26.59	30.21	30.04	---	---
MONTH	19.04	8.99	20.40	10.67	21.77	9.08	28.03	21.77	30.21	23.73	31.46	12.94
YEAR	31.46	8.99										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

FREDERICK COUNTY—Continued

WELL NUMBER.--FR Cg 1. SITE ID.--393156077135701.

LOCATION.--Lat 39°31'56", long 77°13'57", Hydrologic Unit 02070009, at Johnsville. Owner: Private Residence.

AQUIFER.--Ijamsville Formation (saprolite) of Paleozoic age. Aquifer code: 300IJMV.

WELL CHARACTERISTICS.--Dug, stone-lined, domestic, water-table well, depth 42.5 ft; diameter 36 in.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 600 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of wooden well cover, 0.60 ft above land surface.

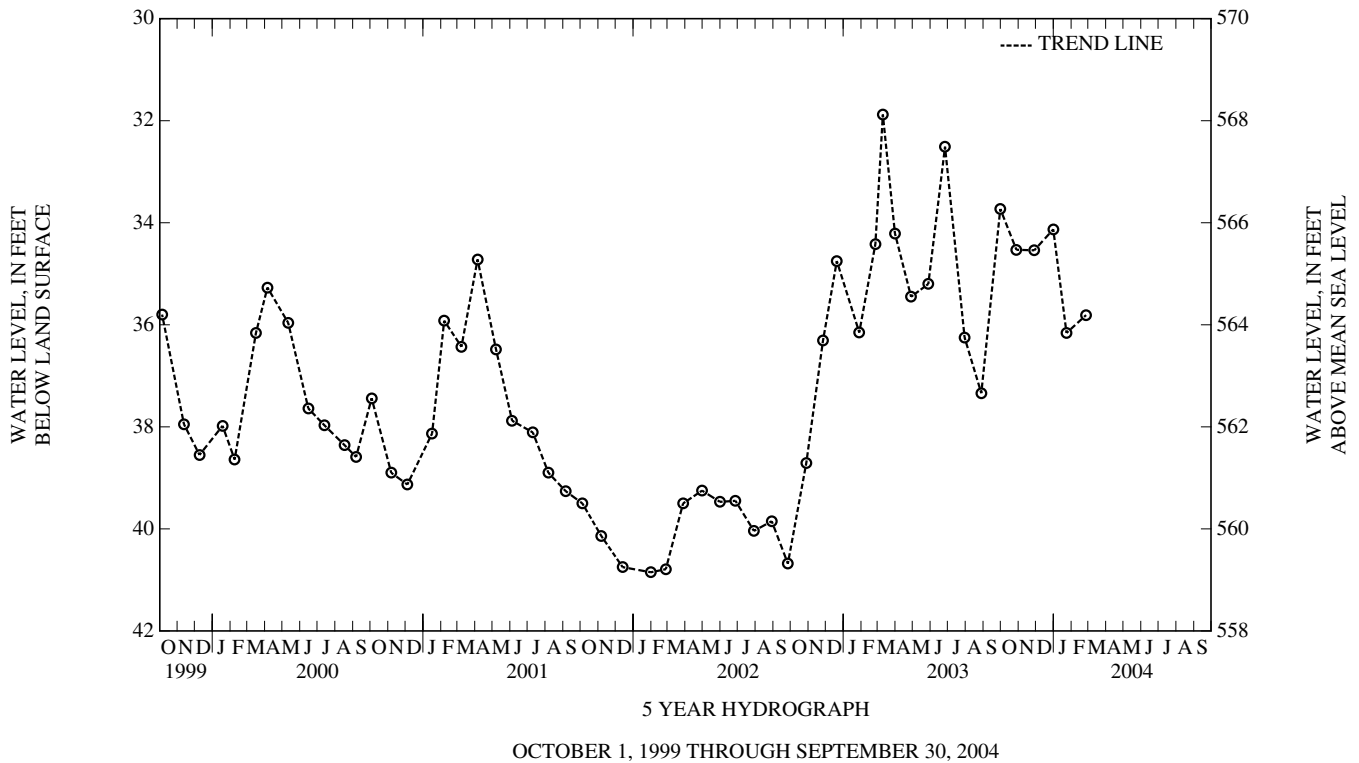
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Well drilled nearby in 2002, for domestic water use.

PERIOD OF RECORD.--June 1946 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.63 ft below land surface, September 29, 1975; lowest measured, 42.02 ft below land surface, October 5, 1982.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	34.53	DEC 31, 2003	34.13	FEB 26, 2004	35.81
NOV 28	34.54	JAN 23, 2004	36.16		
HIGHEST 34.13 DEC 31, 2003					
LOWEST 36.16 JAN 23, 2004					



FREDERICK COUNTY—Continued

WELL NUMBER.--FR Df 35. SITE ID.--392517077190401. PERMIT NUMBER.--FR-73-0852.

LOCATION.--Lat 39°25'17", long 77°19'04", Hydrologic Unit 02070009, north of Eaglehead Drive, near Lake Linganore. Owner: Lake Linganore Association.

AQUIFER.--Urbana Formation of Paleozoic age. Aquifer code: 300URBN.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 302 ft, casing diameter 6 in., to 26 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 570 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface previous to July 2003, when the casing was extended for an instrumentation shelter. Current measuring point is 3.25 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--May 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.09 ft below land surface, May 14, 1998; lowest measured, 64.86 ft below land surface, September 26, 2002.

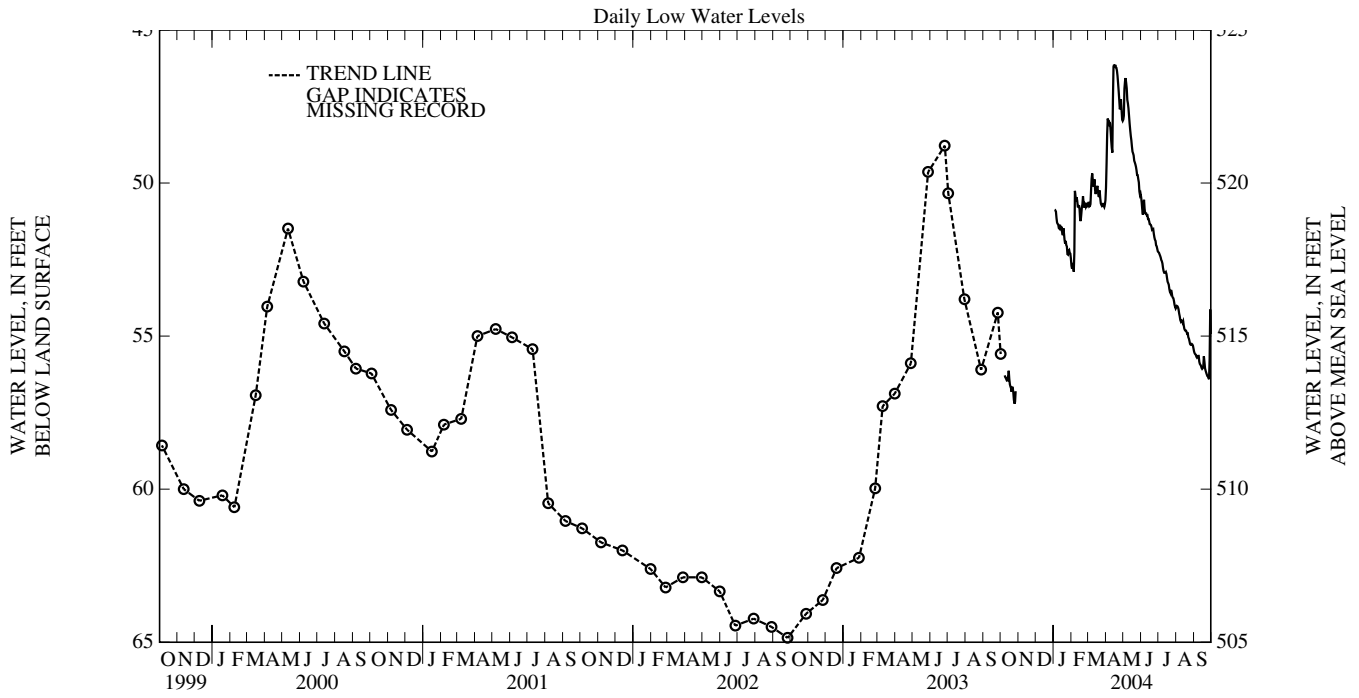
WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08, 2003	56.31	JAN 02, 2004	50.98	JUL 22, 2004	53.64	SEP 30, 2004	55.02
28	56.32	23	52.06	26	53.83		
DEC 12	48.70	FEB 26	50.77	27	53.79		
31	46.97	APR 27	47.16	28	53.86		
HIGHEST 46.97 DEC 31, 2003							
LOWEST 56.32 OCT 28, 2003							

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH										
1	55.62	55.55	---	---	---	---	---	---	52.78	52.62	50.72	50.65				
2	---	---	---	---	---	---	---	---	52.83	52.78	50.67	50.58				
3	---	---	---	---	---	---	---	50.97	50.89	52.78	52.49	50.79	50.67			
4	---	---	---	---	---	---	---	50.93	50.88	52.86	52.56	50.79	50.73			
5	---	---	---	---	---	---	---	51.04	50.91	52.93	52.86	50.78	50.57			
6	---	---	---	---	---	---	---	51.26	51.04	52.88	50.84	50.57	50.02			
7	---	---	---	---	---	---	---	51.33	51.26	50.84	50.09	50.02	49.69			
8	56.32	56.24	---	---	---	---	---	51.35	51.33	50.63	50.15	49.79	49.65			
9	56.37	56.32	---	---	---	---	---	51.43	51.33	50.64	50.54	50.01	49.79			
10	56.42	56.34	---	---	---	---	---	51.52	51.43	50.54	50.41	50.15	50.01			
11	56.45	56.40	---	---	---	---	---	51.52	51.41	50.73	50.43	50.15	49.87			
12	56.43	56.35	---	---	---	---	---	51.42	51.33	50.79	50.73	50.00	49.80			
13	56.52	56.43	---	---	---	---	---	51.51	51.39	50.80	50.75	50.39	50.00			
14	56.52	56.19	---	---	---	---	---	51.55	51.33	50.76	50.71	50.42	50.24			
15	56.29	56.04	---	---	---	---	---	51.56	51.30	51.01	50.71	50.27	50.24			
16	56.51	56.29	---	---	---	---	---	51.70	51.56	51.28	51.01	50.27	50.08			
17	56.64	56.51	---	---	---	---	---	51.74	51.62	51.28	51.17	50.18	50.04			
18	56.67	56.63	---	---	---	---	---	51.62	51.39	51.17	50.91	50.31	50.18			
19	56.80	56.66	---	---	---	---	---	51.78	51.55	50.91	50.76	50.57	50.27			
20	56.87	56.75	---	---	---	---	---	51.96	51.78	50.78	50.50	50.57	50.19			
21	56.75	56.59	---	---	---	---	---	52.00	51.96	50.50	50.41	50.38	50.15			
22	56.78	56.66	---	---	---	---	---	51.97	51.84	50.77	50.50	50.63	50.38			
23	56.97	56.76	---	---	---	---	---	52.06	51.97	50.84	50.75	50.69	50.63			
24	57.20	56.97	---	---	---	---	---	52.24	52.00	50.75	50.62	50.74	50.68			
25	57.24	57.19	---	---	---	---	---	52.36	52.24	50.76	50.62	50.77	50.71			
26	57.21	57.11	---	---	---	---	---	52.34	52.34	50.83	50.72	50.76	50.68			
27	57.12	56.40	---	---	---	---	---	52.34	52.12	50.72	50.72	50.68	50.64			
28	---	---	---	---	---	---	---	52.26	52.12	50.78	50.72	50.81	50.66			
29	---	---	---	---	---	---	---	52.32	52.26	50.78	50.72	50.83	50.75			
30	---	---	---	---	---	---	---	52.34	52.29	---	---	50.75	50.64			
31	---	---	---	---	---	---	---	52.62	52.34	---	---	50.64	50.49			
MONTH	57.24	55.55	---	---	---	---	---	52.62	50.88	52.93	50.09	50.83	49.65			

FREDERICK COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	50.49	49.63	47.95	47.90	50.56	50.38	52.29	52.23	54.14	53.96	55.54	55.49
2	49.63	48.95	47.90	47.60	50.74	50.56	52.31	52.26	54.04	53.98	55.60	55.54
3	48.95	48.03	47.60	46.67	50.97	50.74	52.36	52.29	54.04	54.00	55.61	55.57
4	48.03	47.87	46.73	46.62	51.06	50.97	52.40	52.36	54.08	54.03	55.63	55.59
5	48.12	47.92	46.63	46.51	51.05	50.39	52.47	52.39	54.21	54.08	55.72	55.63
6	48.19	48.11	46.80	46.59	50.72	50.39	52.54	52.47	54.30	54.21	55.73	55.68
7	48.11	47.96	47.07	46.80	50.92	50.72	52.58	52.54	54.43	54.30	55.69	55.66
8	48.10	48.00	47.37	47.07	51.01	50.92	52.69	52.58	54.51	54.43	55.69	55.59
9	48.49	48.10	47.44	47.37	51.03	50.99	52.84	52.69	54.55	54.51	55.77	55.59
10	48.71	48.49	47.66	47.44	51.01	50.99	52.89	52.84	54.52	54.46	55.88	55.77
11	48.99	48.71	47.93	47.66	51.08	51.01	52.95	52.89	54.54	54.47	55.94	55.88
12	49.08	48.53	48.15	47.93	51.13	51.02	52.96	52.89	54.59	54.53	55.97	55.91
13	48.53	46.61	48.38	48.15	51.20	51.13	52.95	52.91	54.57	54.49	56.01	55.95
14	46.61	46.05	48.52	48.38	51.19	51.15	52.95	52.86	54.70	54.57	56.08	55.99
15	46.22	46.05	48.71	48.52	51.30	51.19	53.05	52.91	54.79	54.70	56.10	56.05
16	46.28	46.18	48.90	48.71	51.37	51.30	53.18	53.05	54.83	54.78	56.08	56.02
17	46.18	46.09	49.03	48.90	51.38	51.33	53.27	53.18	54.86	54.79	56.06	55.86
18	46.27	46.14	49.06	49.00	51.39	51.36	53.29	53.25	54.85	54.81	55.86	55.58
19	46.28	46.17	49.19	49.04	51.50	51.39	53.39	53.28	54.92	54.84	55.98	55.73
20	46.43	46.21	49.32	49.19	51.58	51.45	53.53	53.39	54.95	54.90	56.10	55.98
21	46.58	46.43	49.37	49.30	51.55	51.45	53.58	53.53	55.01	54.88	56.16	56.10
22	46.90	46.58	49.41	49.35	51.55	51.47	53.64	53.54	55.06	55.01	56.22	56.16
23	47.09	46.90	49.52	49.41	51.72	51.55	53.54	53.48	55.12	55.06	56.28	56.22
24	47.49	47.09	49.66	49.52	51.83	51.72	53.64	53.50	55.22	55.12	56.33	56.28
25	47.63	47.49	49.76	49.66	51.86	51.83	53.72	53.64	55.28	55.22	56.35	56.30
26	47.62	47.38	49.78	49.71	51.98	51.85	53.76	53.72	55.32	55.25	56.41	56.33
27	47.38	47.16	49.91	49.78	52.06	51.98	53.83	53.73	55.32	55.25	56.44	56.39
28	47.80	47.34	50.13	49.91	52.09	52.04	53.92	53.82	55.29	55.22	56.39	54.01
29	47.97	47.80	50.36	50.13	52.19	52.08	54.01	53.92	55.31	55.25	54.61	53.84
30	48.00	47.95	50.41	50.36	52.26	52.19	54.08	54.00	55.35	55.29	55.17	54.61
31	---	---	50.38	50.32	---	---	54.14	54.08	55.49	55.34	---	---
MONTH	50.49	46.05	50.41	46.51	52.26	50.38	54.14	52.23	55.49	53.96	56.44	53.84
YEAR	57.24	46.05										



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY

WELL NUMBER.--GA Ag 1. SITE ID.--394017078581701.

LOCATION.--Lat 39°40'17", long 78°58'17", Hydrologic Unit 02070002, in the Savage River Valley, 2.5 mi northwest of Frostburg. Owner: Town of Frostburg.

AQUIFER.--Greenbrier Formation of Upper Mississippian age. Aquifer code: 331GRBR.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, Reported depth 30 ft, measured depth 14 ft; casing diameter 8 in., to unknown depth; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

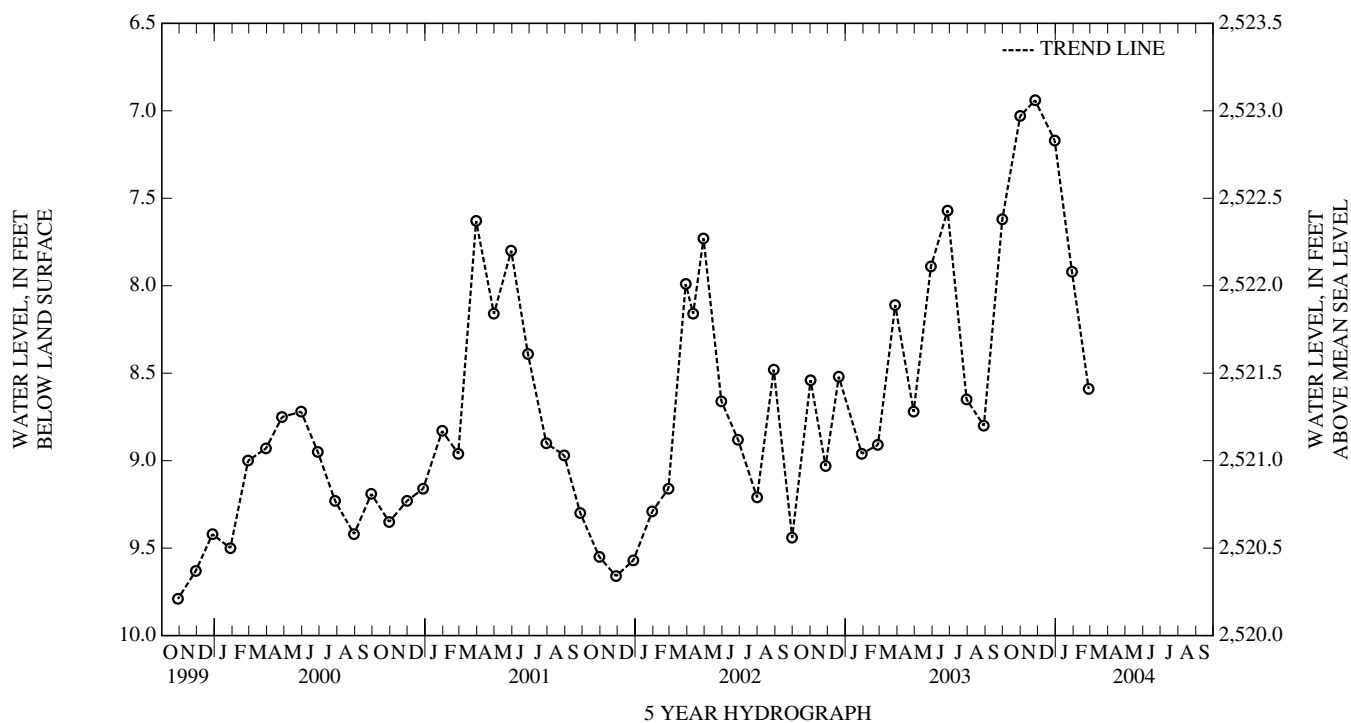
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by nearby ground-water withdrawal.

PERIOD OF RECORD.--October 1946 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.71 ft below land surface, January 14, 1950; lowest measured, 14.59 ft below land surface, January 28, 1985.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	7.03	DEC 30, 2003	7.17	FEB 27, 2004	8.59
NOV 26	6.94	JAN 29, 2004	7.92		
HIGHEST	6.94	NOV 26, 2003			
LOWEST	8.59	FEB 27, 2004			



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Bc 1. SITE ID.--393749079190301.

LOCATION.--Lat 39°37'49", long 79°19'03", Hydrologic Unit 05020006, at Accident. Owner: Private Residence.

AQUIFER.--Hampshire Formation of Upper Devonian age. Aquifer code: 341HMPR.

WELL CHARACTERISTICS.--Dug, stone-lined, domestic, water-table well, depth 20 ft; diameter 36 in.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,415 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 1 in. board cover, 2.30 ft above land surface.

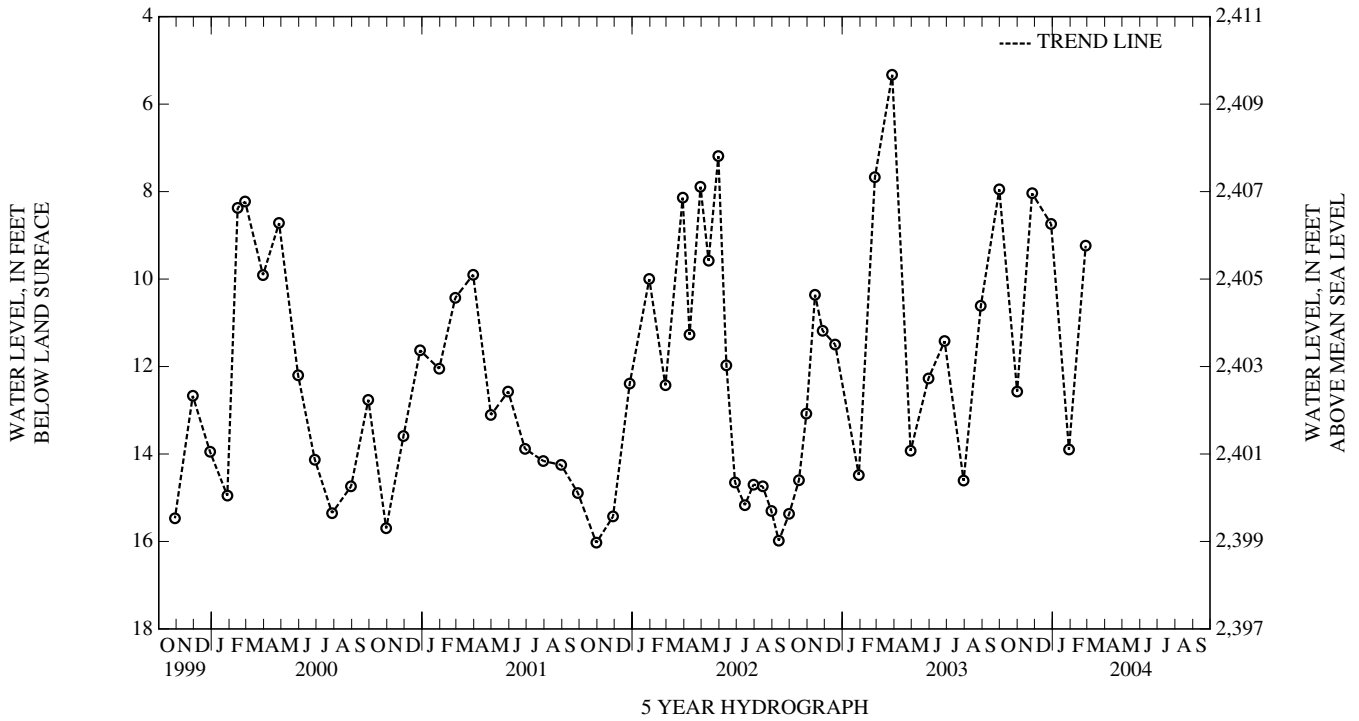
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--August 1949 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.25 ft below land surface, March 6, 1979; lowest measured, 19.65 ft below land surface, December 9, 1953.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	12.57	DEC 29, 2003	8.74	FEB 27, 2004	9.24
NOV 26	8.04	JAN 29, 2004	13.90		
HIGHEST 8.04 NOV 26, 2003					
LOWEST 13.90 JAN 29, 2004					



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Eb 78. SITE ID.--392439079231801. PERMIT NUMBER.--GA-88-0611.

LOCATION.--Lat 39°24'39", long 79°23'18", Hydrologic Unit 05020006, at Southern Pines, near Broadford Road, and Southern Pines Drive, Mountain Lake Park. Owner: Private Residence.

AQUIFER.--Foreknobs Formation of Upper Devonian age. Aquifer code: (code in review).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 307 ft; casing diameter 6 in., to 40 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

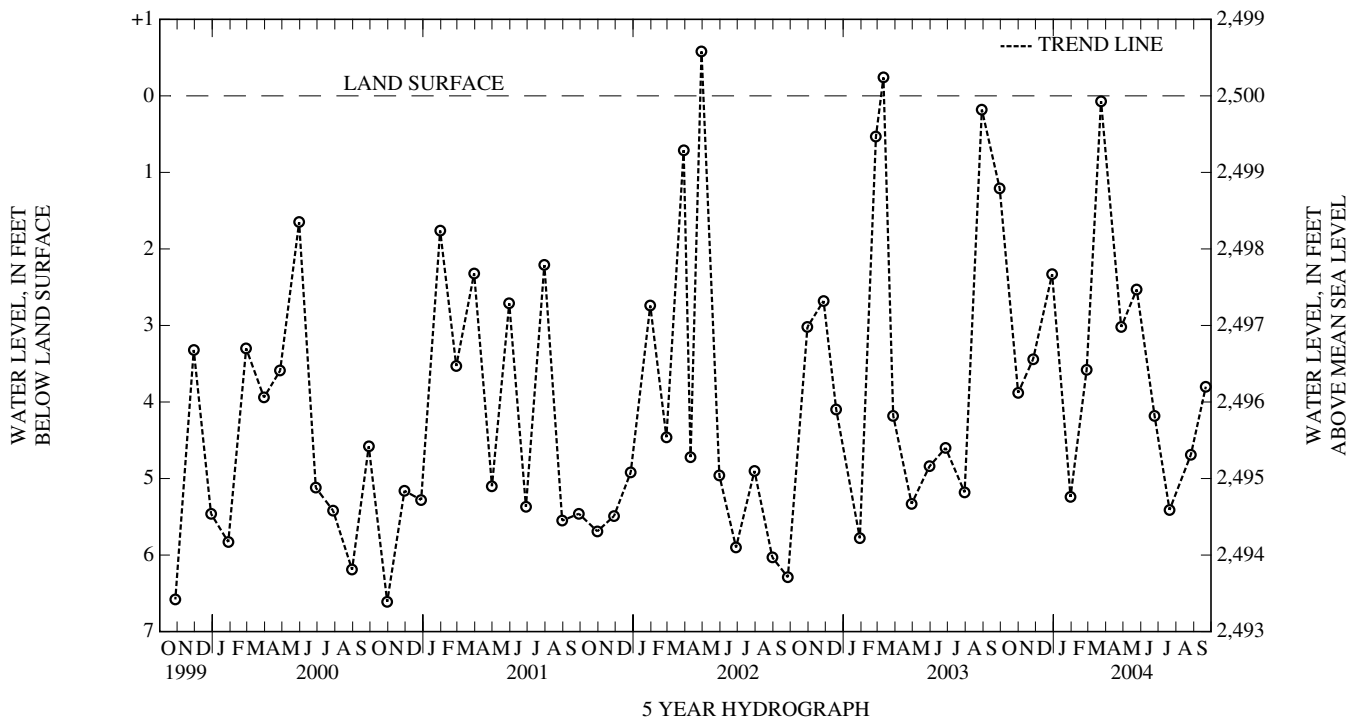
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--March 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, flowing on March 29, 1993, and March 30, 1994; lowest measured, 9.12 ft below land surface, August 30, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	3.88	JAN 30, 2004	5.24	APR 27, 2004	3.02	JUL 20, 2004	5.41
NOV 26	3.44	FEB 27	3.58	MAY 24	2.53	AUG 26	4.69
DEC 29	2.33	MAR 23	.07	JUN 24	4.18	SEP 21	3.80
HIGHEST .07 MAR 23, 2004							
LOWEST 5.41 JUL 20, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 28. SITE ID.--391512079270901. PERMIT NUMBER.--GA-73-1697.

LOCATION.--Lat 39°15'12", long 79°27'09", Hydrologic Unit 02070002, on south side of Red Oak Road, 0.6 mi west from the intersection with Kempton Road, 2.6 mi west of Wilson. Owner: Mettiki Coal Corp.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 341 ft; casing diameter 6 in., to 317 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,890 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.50 ft above land surface.

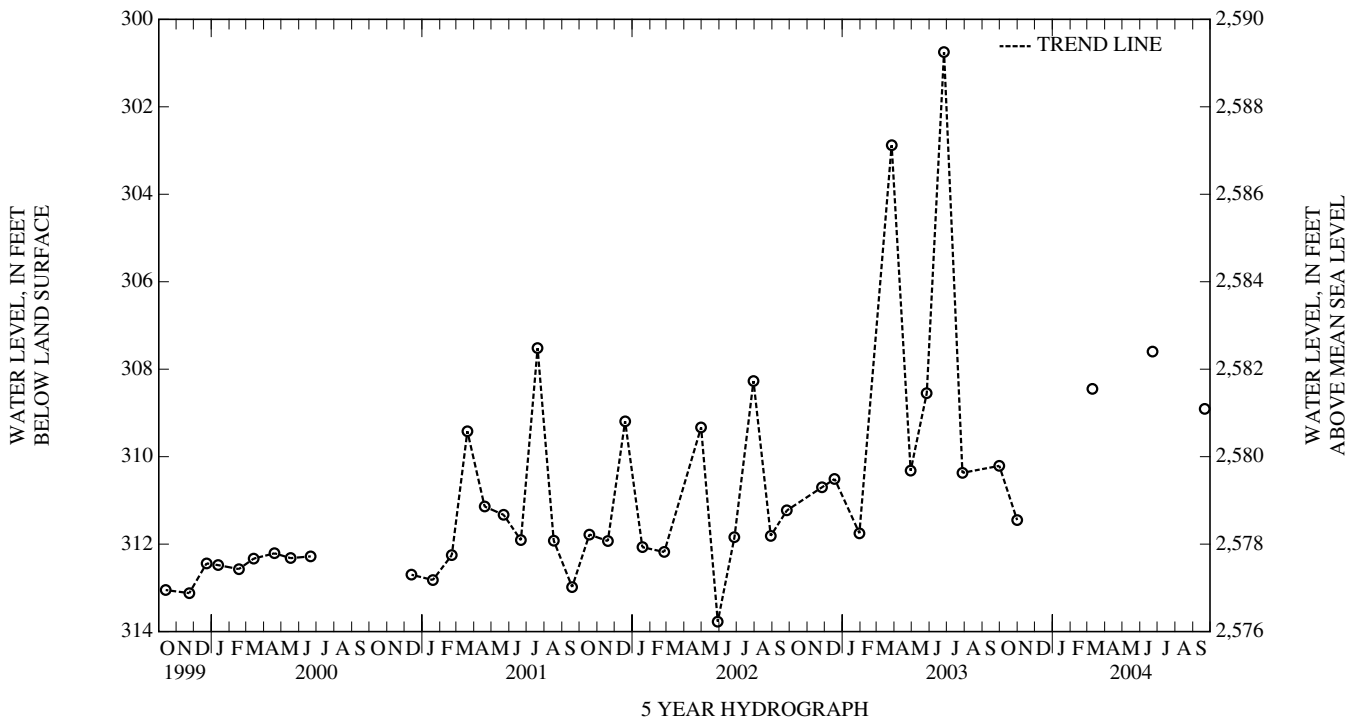
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. Water level measurements could not be measured from July 2000 through November 2000, and March 27, 2002 because of an obstruction in the well. A well depth of 337.35 ft below land surface was measured on April 30, 2002.

PERIOD OF RECORD.--June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 100.60 ft below land surface, December 14, 1978; lowest measured dry at 332.43 ft below land surface, May 16, 1985.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	311.45	MAR 10, 2004	308.45	JUN 22, 2004	307.60	SEP 21, 2004	308.91
HIGHEST 307.60 JUN 22, 2004							
LOWEST 311.45 OCT 31, 2003							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 29. SITE ID.--391512079270902. PERMIT NUMBER.--GA-73-1698.

LOCATION.--Lat 39°15'12", long 79°27'09", Hydrologic Unit 02070002, on south side of Red Oak Road, 0.9 mi west from intersection with Kempton Road, 2.6 mi west of Wilson. Owner: Mettiki Coal Corp.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 226 ft; casing diameter 6 in., to 203 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,890 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 211.0 ft below land surface was measured on April 30, 2002.

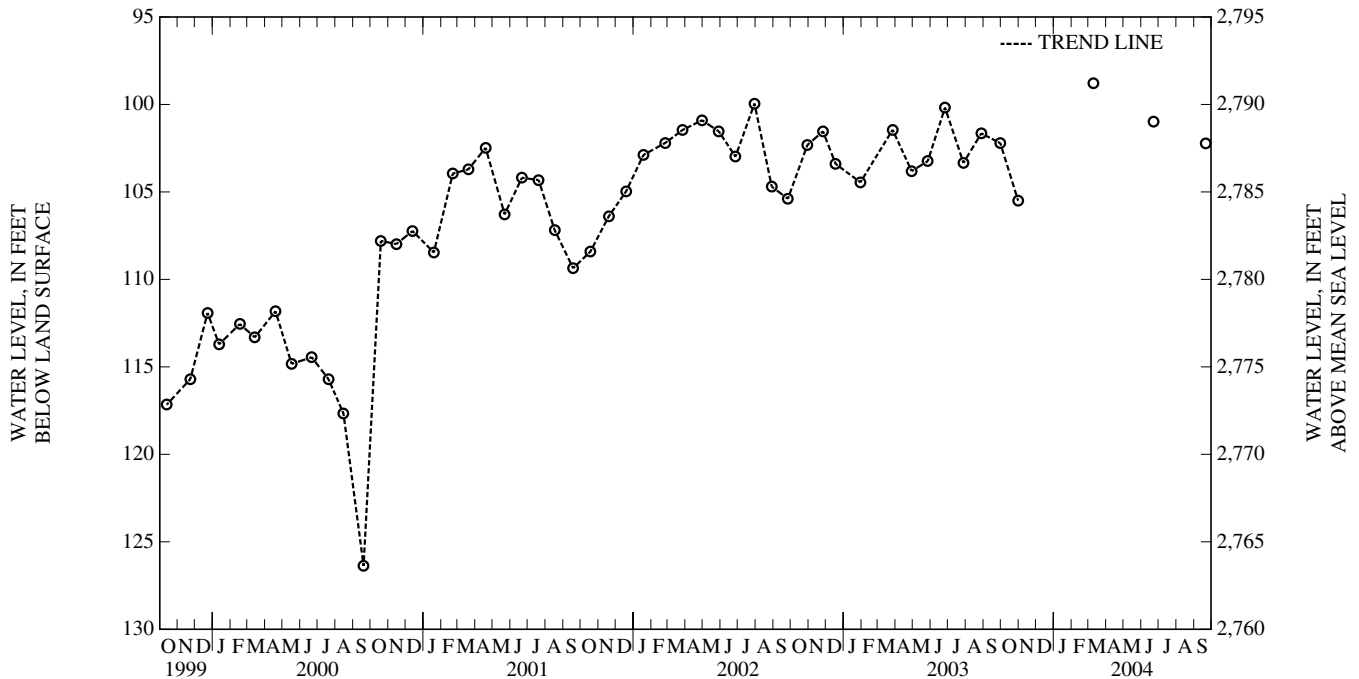
PERIOD OF RECORD.--June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 98.78 ft below land surface, March 10, 2004; lowest water level measured, dry on November 17, 18, 1982, December 28, 1982, February 18, 1983.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	105.50	MAR 10, 2004	98.78	JUN 22, 2004	100.98	SEP 21, 2004	102.23

HIGHEST 98.78 MAR 10, 2004
 LOWEST 105.50 OCT 31, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY—Continued

WELL NUMBER.--GA Fa 31. SITE ID.--391539079254601. PERMIT NUMBER.--GA-73-2142.

LOCATION.--Lat 39°15'37", long 79°25'45", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Road, 1.7 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Allegheny Formation of Middle Pennsylvanian age. Aquifer code: 324ALGN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 606 ft; casing diameter 8 in., to 25.5 ft; casing diameter 4 in., to 470 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval.

DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.60 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations.

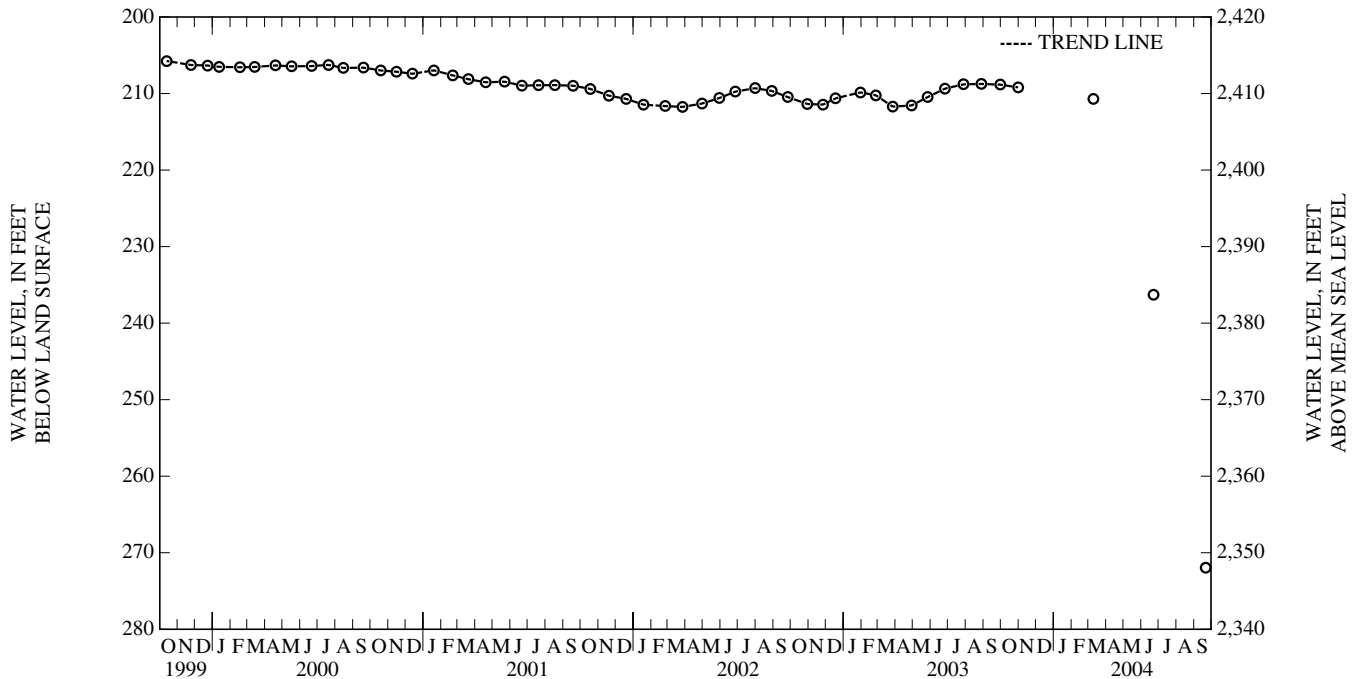
PERIOD OF RECORD.--April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.31 ft below land surface, April 8, 1980; lowest measured, 271.97 ft below land surface, September 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	209.20	MAR 10, 2004	210.70	JUN 22, 2004	236.30	SEP 21, 2004	271.97

HIGHEST 209.20 OCT 31, 2003
 LOWEST 271.97 SEP 21, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 32. SITE ID.--391539079254602. PERMIT NUMBER.--GA-73-2143.

LOCATION.--Lat 39°15'39", long 79°25'46", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Road, 1.7 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 473 ft; casing diameter 8 in., to 23 ft; casing diameter 4 in., to 430 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from July 1980 to April 1981.

DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.15 ft above land surface.

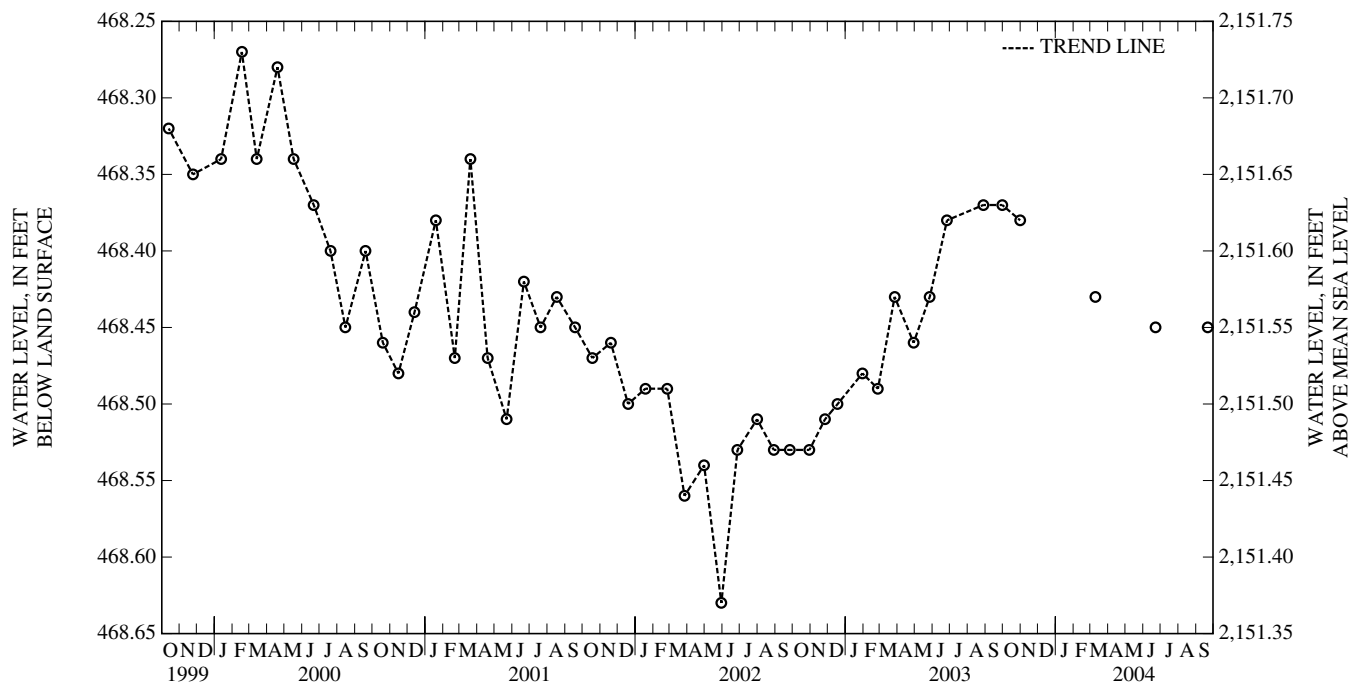
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 470.35 ft below land surface was measured on April 30, 2002.

PERIOD OF RECORD.--February 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.55 ft below land surface, February 27, 1980; lowest measured, 474.80 ft below land surface, July 16, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	468.38	MAR 10, 2004	468.43	JUN 22, 2004	468.45	SEP 21, 2004	468.45
HIGHEST 468.38 OCT 31, 2003							
LOWEST 468.45 JUN 22, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 33. SITE ID.--391539079254603. PERMIT NUMBER.--GA-73-2144.

LOCATION.--Lat 39°15'39", long 79°25'46", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Road, 1.7 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 391 ft; measured depth, 324 ft on December 15, 1995, (see REMARKS); casing diameter 8 in., to 23 ft; casing diameter 4 in., to 318 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital recorder--60-minute recorder interval from July 1980 to October 1982.

DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

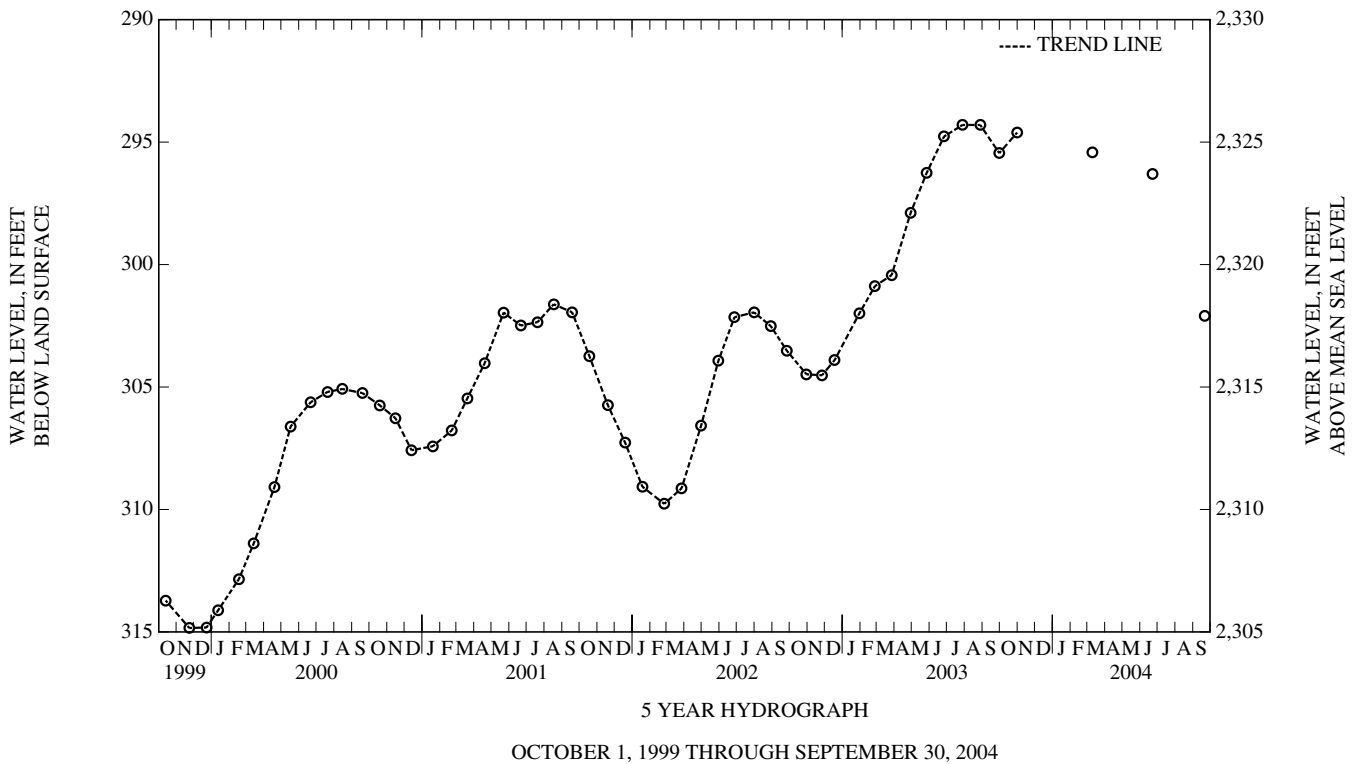
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. Prior to December 15, 1995, the well was undermined and collapsed, the depth of the well is now 324 ft.

PERIOD OF RECORD.--February 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.31 ft below land surface, February 27, 1980; lowest measured, dry at 324 ft below land surface on December 15, 1995, January 18 and June 13, 1996.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	294.61	MAR 10, 2004	295.42	JUN 22, 2004	296.30	SEP 21, 2004	302.10
HIGHEST 294.61 OCT 31, 2003							
LOWEST 302.10 SEP 21, 2004							



GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 34. SITE ID.--391539079254604. PERMIT NUMBER.--GA-73-2145.

LOCATION.--Lat 39°15'39", long 79°25'46", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Road, 1.7 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 115 ft; casing diameter 8 in., to 23.5 ft; casing diameter 4 in., to 96 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, from July 1980 to October 1990.

DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well.

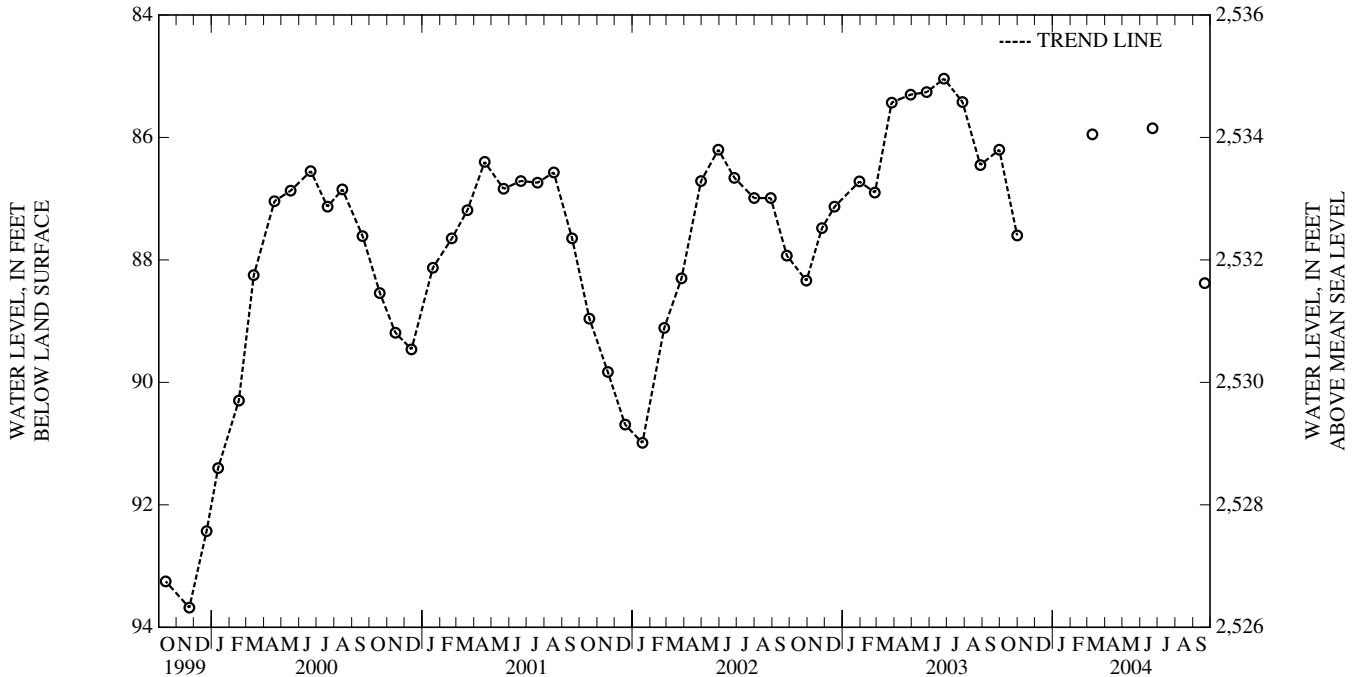
PERIOD OF RECORD.--February 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.05 ft below land surface, February 26, 1980; lowest measured, 95.25 ft below land surface, December 11, 1991.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	87.60	MAR 10, 2004	85.95	JUN 22, 2004	85.85	SEP 21, 2004	88.38

HIGHEST 85.85 JUN 22, 2004
 LOWEST 88.38 SEP 21, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 38. SITE ID.--391501079260001. PERMIT NUMBER.--GA-73-2125.

LOCATION.--Lat 39°15'01", long 79°26'00", Hydrologic Unit 02070002, at intersection of Kempton Road and Dobbin Road, 3.6 mi south of Table Rock.
Owner: Private Residence.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, domestic, water-table well, depth 118 ft, casing diameter 6 in., to 39 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,680 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

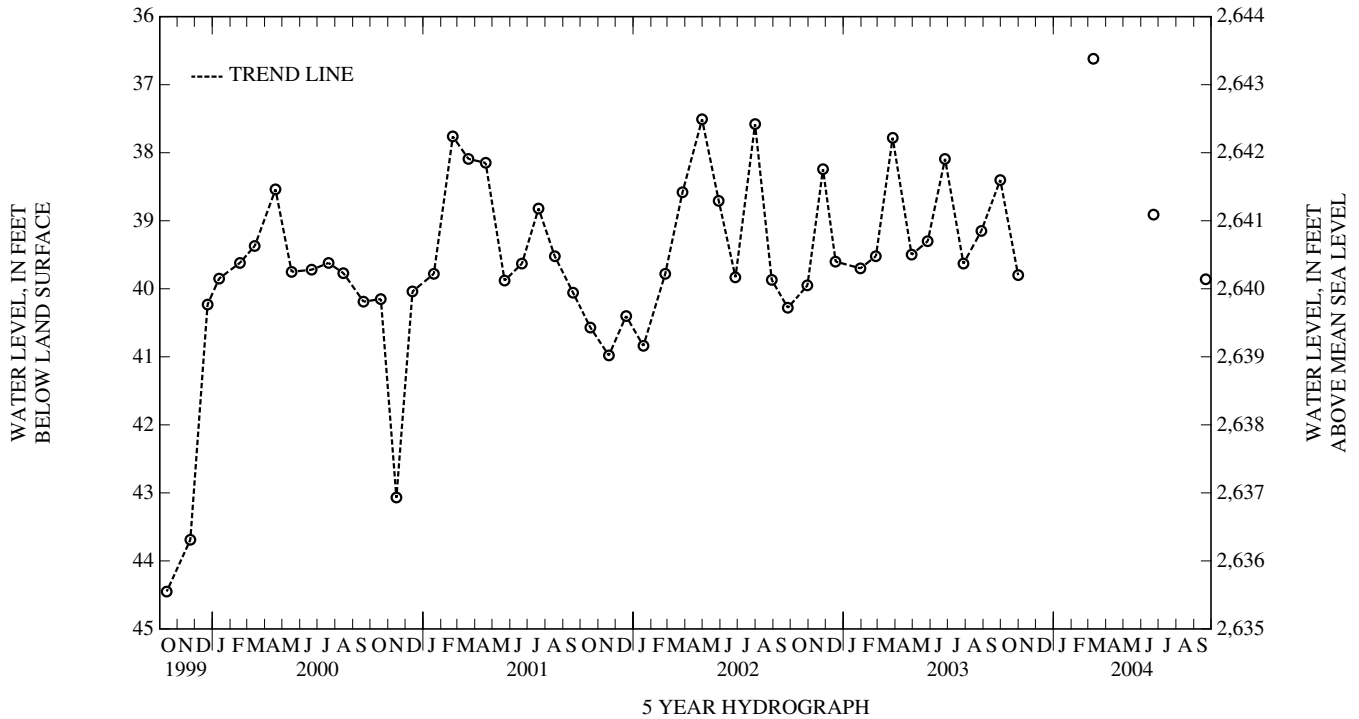
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by nearby coal mining operations.

PERIOD OF RECORD.--February 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.46 ft below land surface, March 30, 1993; lowest measured, 59.72 ft below land surface, October 14, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	39.80	MAR 10, 2004	36.62	JUN 22, 2004	38.91	SEP 21, 2004	39.86
HIGHEST 36.62 MAR 10, 2004							
LOWEST 39.86 SEP 21, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 22. SITE ID.--391530079244401. PERMIT NUMBER.--GA-73-2146.

LOCATION.--Lat 39°15'30", long 79°24'44", Hydrologic Unit 02070002, south side of Wilson Road, 500 ft west of the intersection with Wilson-Coronna Road, 0.4 mi northwest of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Allegheny Formation of Middle Pennsylvanian age. Aquifer code: 324ALGN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 640 ft; casing diameter 4 in., to 517 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, from May 1980 to October 1990.

DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.0 ft above land surface.

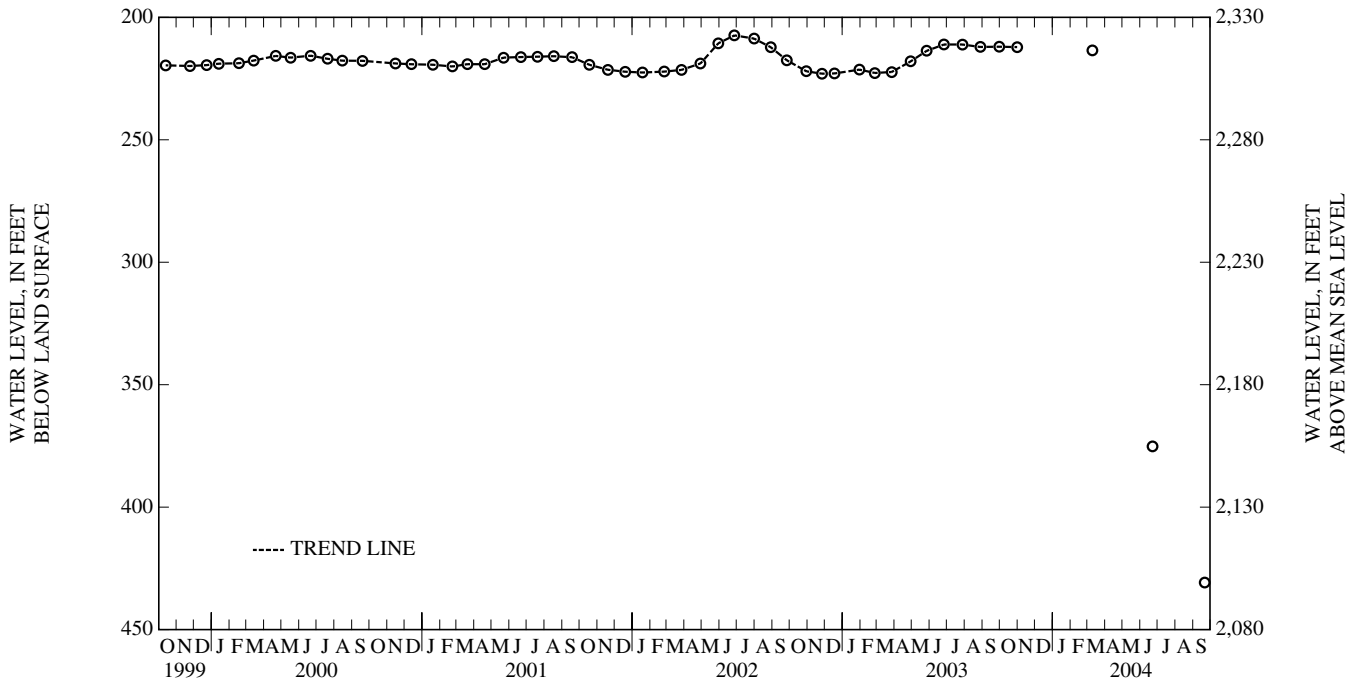
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 530 ft below land surface was measured on April 30, 2002.

PERIOD OF RECORD.--April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.59 ft below land surface, April 8, 1980; lowest measured, 430.81 ft below land surface, September 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	212.15	MAR 10, 2004	213.45	JUN 22, 2004	375.20	SEP 21, 2004	430.81
HIGHEST 212.15 OCT 31, 2003							
LOWEST 430.81 SEP 21, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY—Continued

WELL NUMBER.--GA Fb 24. SITE ID.--391530079244403. PERMIT NUMBER.--GA-73-2177.

LOCATION.--Lat 39°15'30", long 79°24'44", Hydrologic Unit 02070002, south side of Wilson Road, 500 ft west of the intersection with Wilson-Coronna Road, 0.4 mi northwest of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 400 ft; casing diameter 4 in., to 340 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, from May 1980 to October 1990.

DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

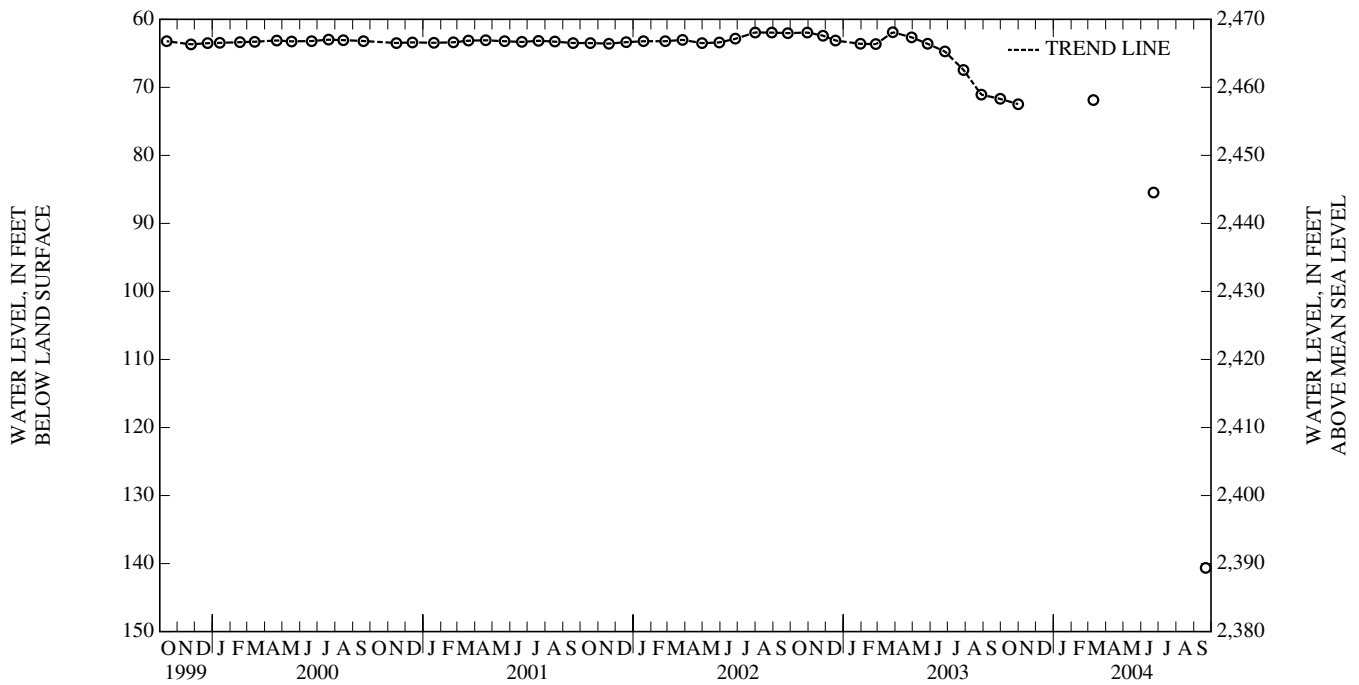
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 394 ft below land surface was measured on April 30, 2002.

PERIOD OF RECORD.--April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.08 ft below land surface, January 12, 1981; lowest measured, 140.66 ft below land surface, September 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	72.46	MAR 10, 2004	71.88	JUN 22, 2004	85.48	SEP 21, 2004	140.66
HIGHEST 71.88 MAR 10, 2004							
LOWEST 140.66 SEP 21, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 25. SITE ID.--391530079244404. PERMIT NUMBER.--GA-73-2178.

LOCATION.--Lat 39°15'30", long 79°24'44", Hydrologic Unit 02070002, south side of Wilson Road, 500 ft west of the intersection with Wilson-Coronna Road, 0.4 mi northwest of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 180 ft; casing diameter 4 in., to 120 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from June 1980 to October 1990.

DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

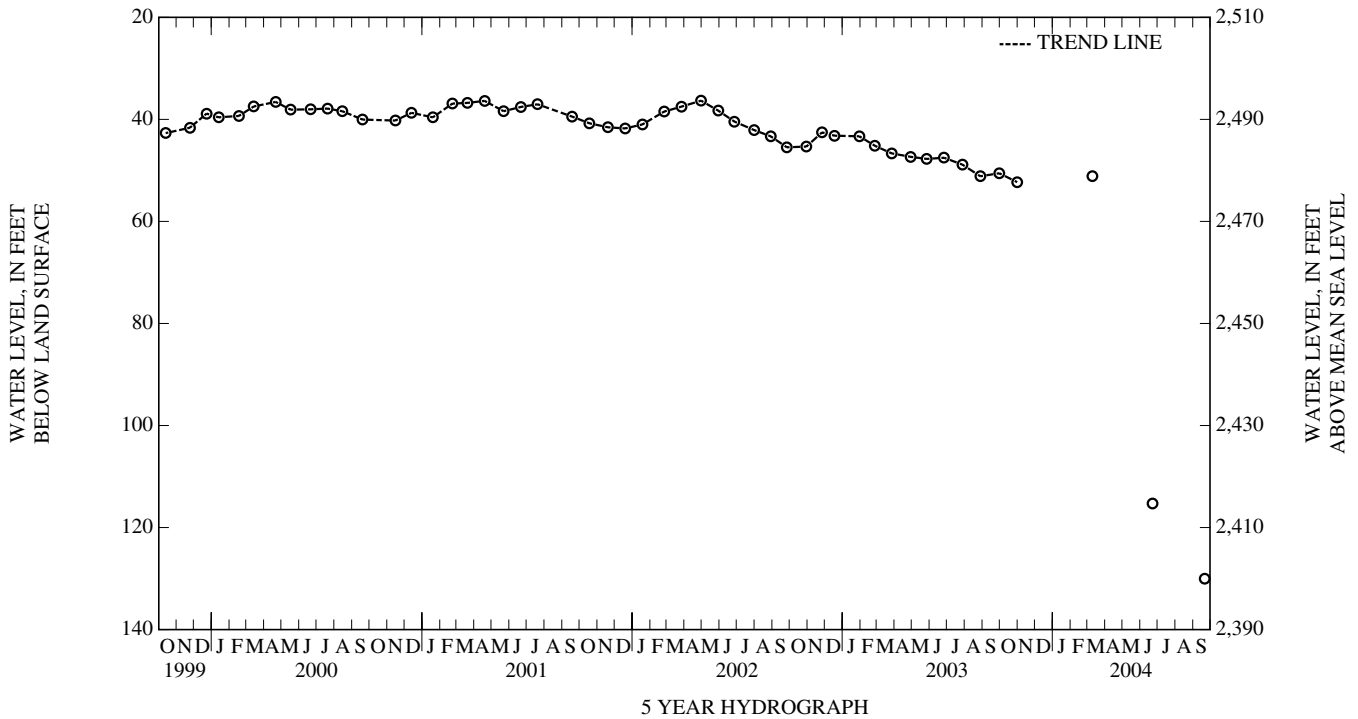
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 121 ft below land surface was measured on April 30, 2002.

PERIOD OF RECORD.--April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.89 ft below land surface, May 11, 1981; lowest measured, 130.00 ft below land surface, September 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	52.30	MAR 10, 2004	51.15	JUN 22, 2004	115.31	SEP 21, 2004	130.00
HIGHEST 51.15 MAR 10, 2004							
LOWEST 130.00 SEP 21, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 27. SITE ID.--391513079243602. PERMIT NUMBER.--GA-73-2182.

LOCATION.--Lat 39°15'13", long 79°24'36", Hydrologic Unit 02070002, 0.6 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 656 ft; casing diameter 4 in., to 590 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, from June 1980 to July 1990.

DATUM.--Elevation of land surface is 2,760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 610 ft below land surface was measured on April 30, 2002.

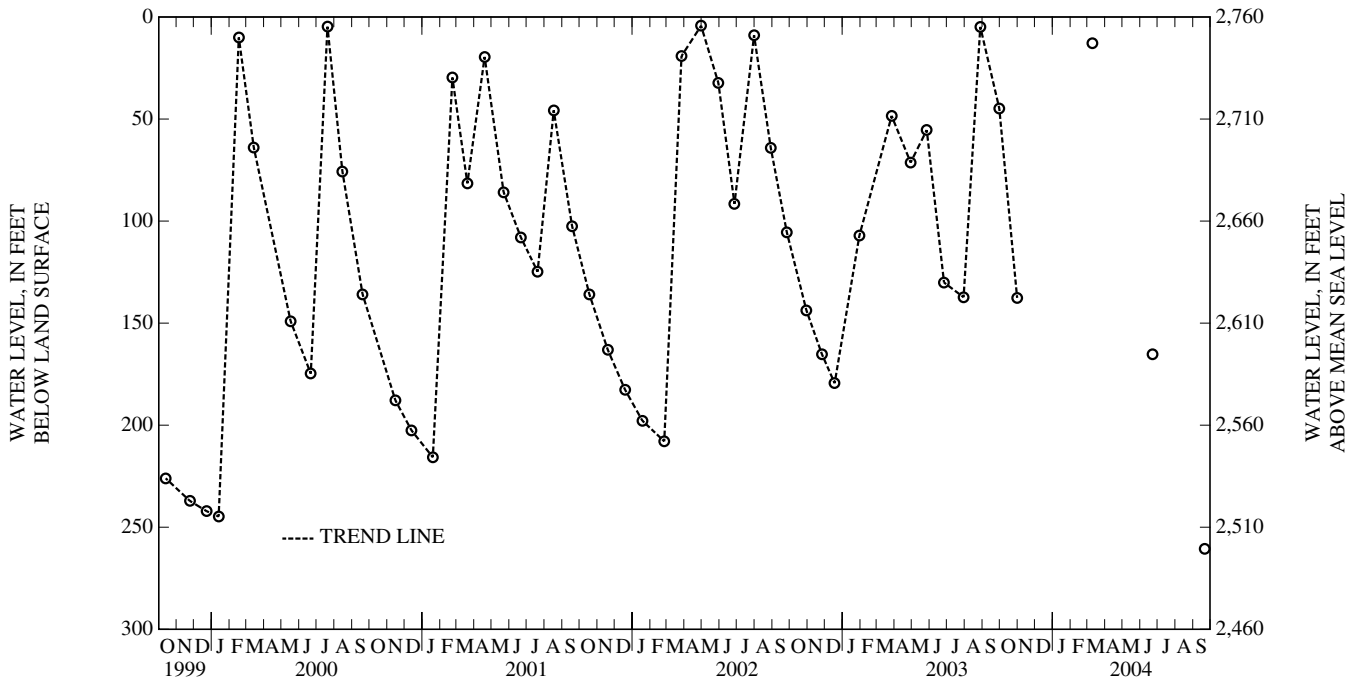
PERIOD OF RECORD.--June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.27 ft below land surface, February 9, 1994; lowest measured, 274.12 ft below land surface, December 1, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	137.62	MAR 10, 2004	12.84	JUN 22, 2004	165.20	SEP 21, 2004	260.60

HIGHEST 12.84 MAR 10, 2004
 LOWEST 260.60 SEP 21, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 30. SITE ID.--391513079243605. PERMIT NUMBER.--GA-73-2185.

LOCATION.--Lat 39°15'13", long 79°24'36", Hydrologic Unit 02070002, 0.6 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 85 ft; casing diameter 4 in., to 82 ft, casing perforated from 77 to 82 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from September 1984 to October 1990.

DATUM.--Elevation of land surface is 2,760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

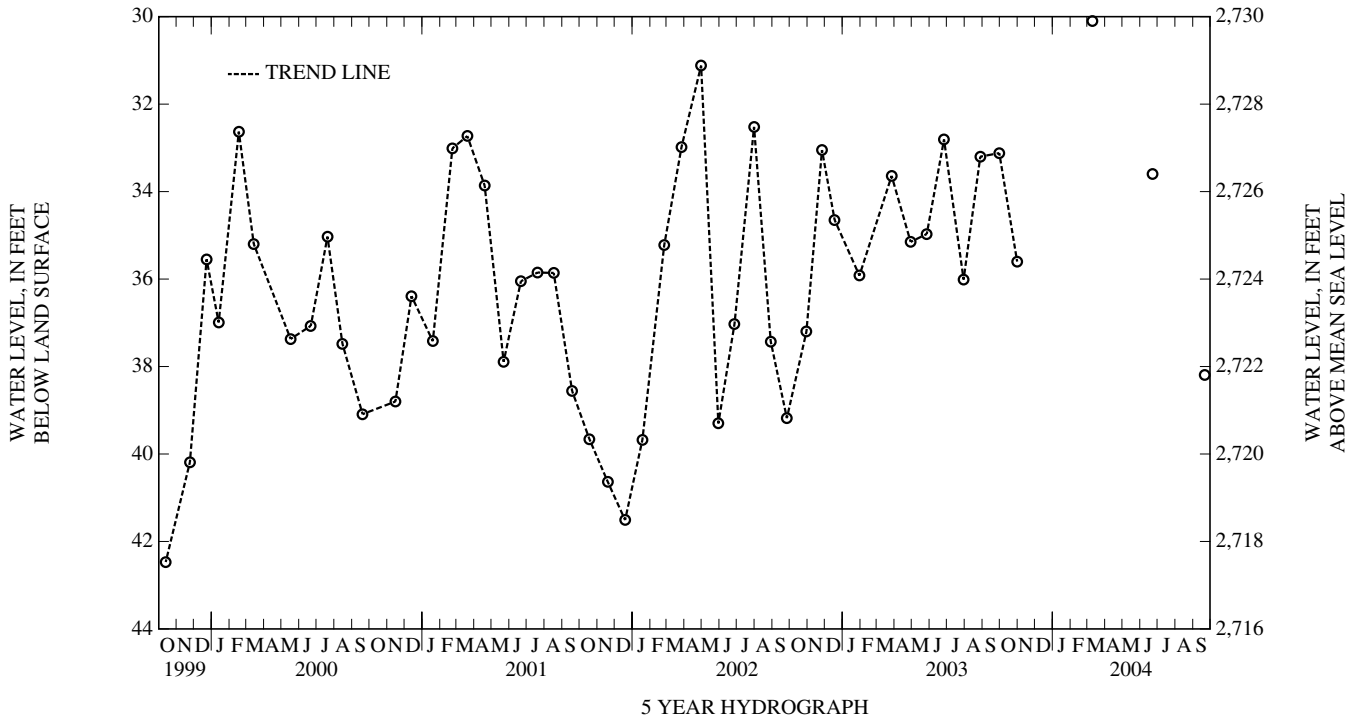
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations.

PERIOD OF RECORD.--June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.90 ft below land surface, February 25, 1981; lowest measured, 45.00 ft below land surface, November 6, 1991.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	35.60	MAR 10, 2004	30.10	JUN 22, 2004	33.60	SEP 21, 2004	38.19
HIGHEST 30.10 MAR 10, 2004							
LOWEST 38.19 SEP 21, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 36. SITE ID.--391715079223102. PERMIT NUMBER.--GA-81-1342.

LOCATION.--Lat 39°17'15", long 79°22'31", Hydrologic Unit 02070002. Owner: Mettiki Coal Co.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, confined aquifer well, depth 631 ft; casing diameter 6 in., to 620 ft depth; open hole.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,565 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.60 ft above land surface.

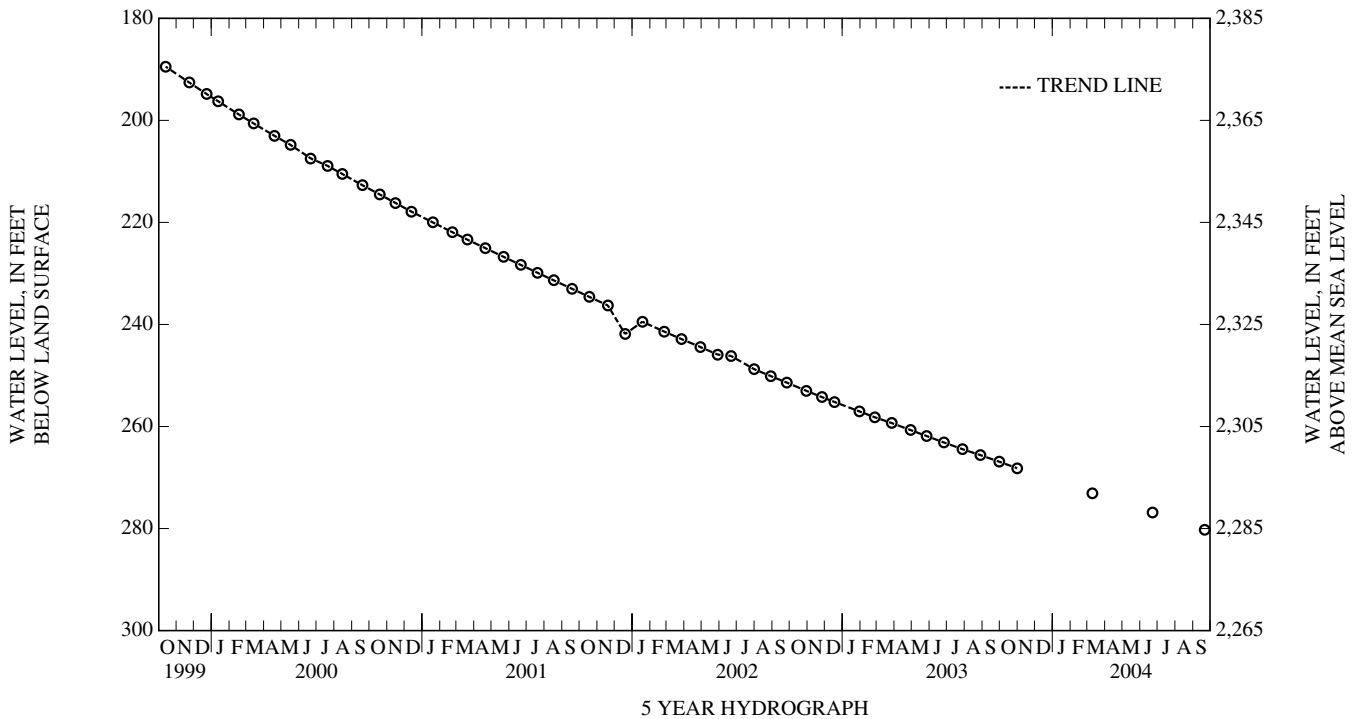
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by nearby pumping.

PERIOD OF RECORD.--April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.95 ft below land surface, June 3, 1988; lowest measured, 280.24 ft below land surface, September 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	268.17	MAR 10, 2004	273.09	JUN 22, 2004	276.88	SEP 21, 2004	280.24
HIGHEST 268.17 OCT 31, 2003							
LOWEST 280.24 SEP 21, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 37. SITE ID.--391715079223103. PERMIT NUMBER.--GA-81-1341.

LOCATION.--Lat 39°17'15", long 79°22'31", Hydrologic Unit 02070002. Owner: Mettiki Coal Co.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, confined aquifer well, depth 470 ft; casing diameter 6 in., to 430 ft; open hole.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,565 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.20 ft above land surface.

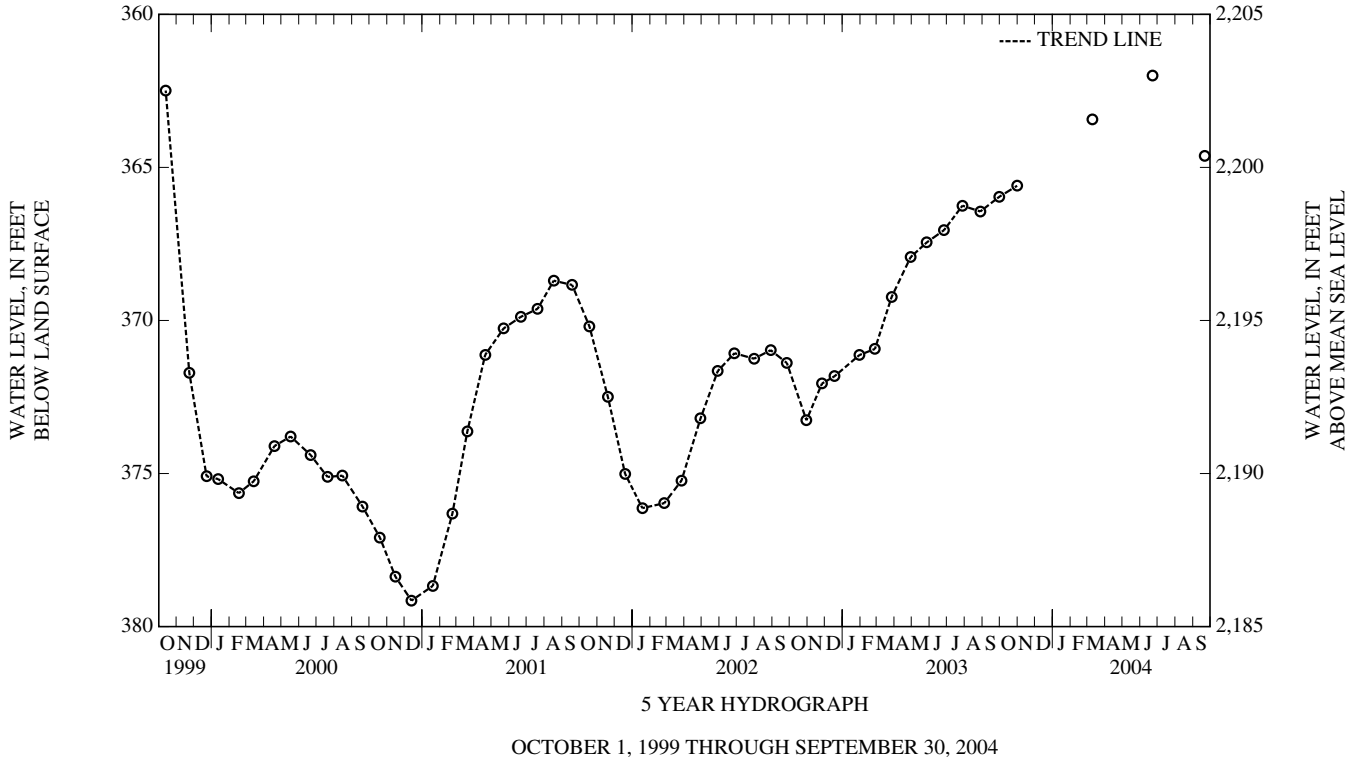
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by nearby pumping.

PERIOD OF RECORD.--April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 132.70 ft below land surface, November 7, 1989; lowest measured, 379.15 ft below land surface, December 13, 2000.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	365.60	MAR 10, 2004	363.43	JUN 22, 2004	362.00	SEP 21, 2004	364.62
HIGHEST 362.00 JUN 22, 2004							
LOWEST 365.60 OCT 31, 2003							



GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 38. SITE ID.--391715079223104. PERMIT NUMBER.--GA-81-1340.

LOCATION.--Lat 39°17'15", long 79°22'31", Hydrologic Unit 02070002. Owner: Mettiki Coal Co.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, confined aquifer well, depth 230 ft., casing diameter 6 in., to 215 ft; open hole.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,565 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.20 ft above land surface.

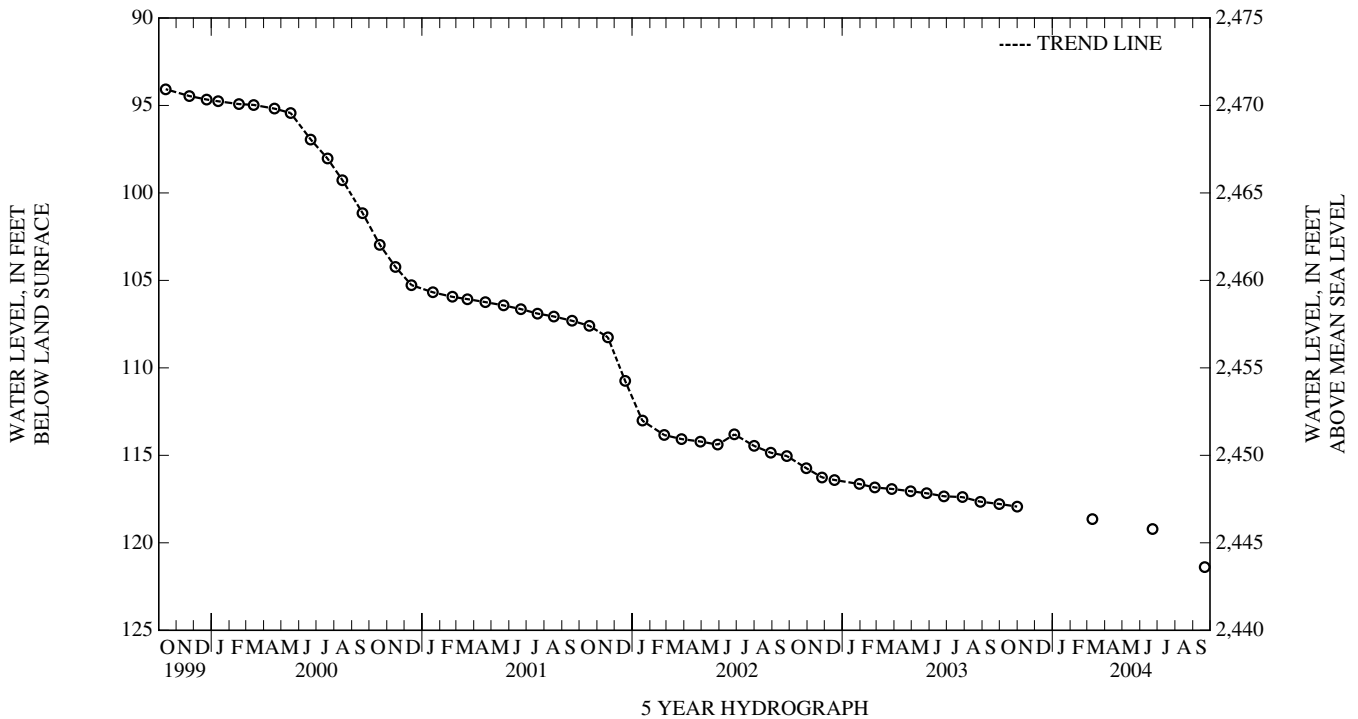
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by nearby pumping.

PERIOD OF RECORD.--April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 91.76 ft below land surface, September 23, 1997 and October 28, 1997; lowest measured, 121.39 ft below land surface, September 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	117.93	MAR 10, 2004	118.64	JUN 22, 2004	119.22	SEP 21, 2004	121.39
HIGHEST 117.93 OCT 31, 2003							
LOWEST 121.39 SEP 21, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GARRETT COUNTY--Continued

WELL NUMBER.--GA Ga 16. SITE ID.--391420079264901. PERMIT NUMBER.--GA-81-0953.

LOCATION.--Lat 39°14'20", long 79°26'49", Hydrologic Unit 02070002, east of Kempton Road, 100 ft north of Laurel Run, 2.8 mi southwest of Wilson.
 Owner: Mettiki Coal Corp.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 147 ft; casing diameter 6 in., to 110 ft, open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from March 1988 to current year.

DATUM.--Elevation of land surface is 2,690 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter floor, 3.20 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations.

PERIOD OF RECORD.--November 1986 to current year.

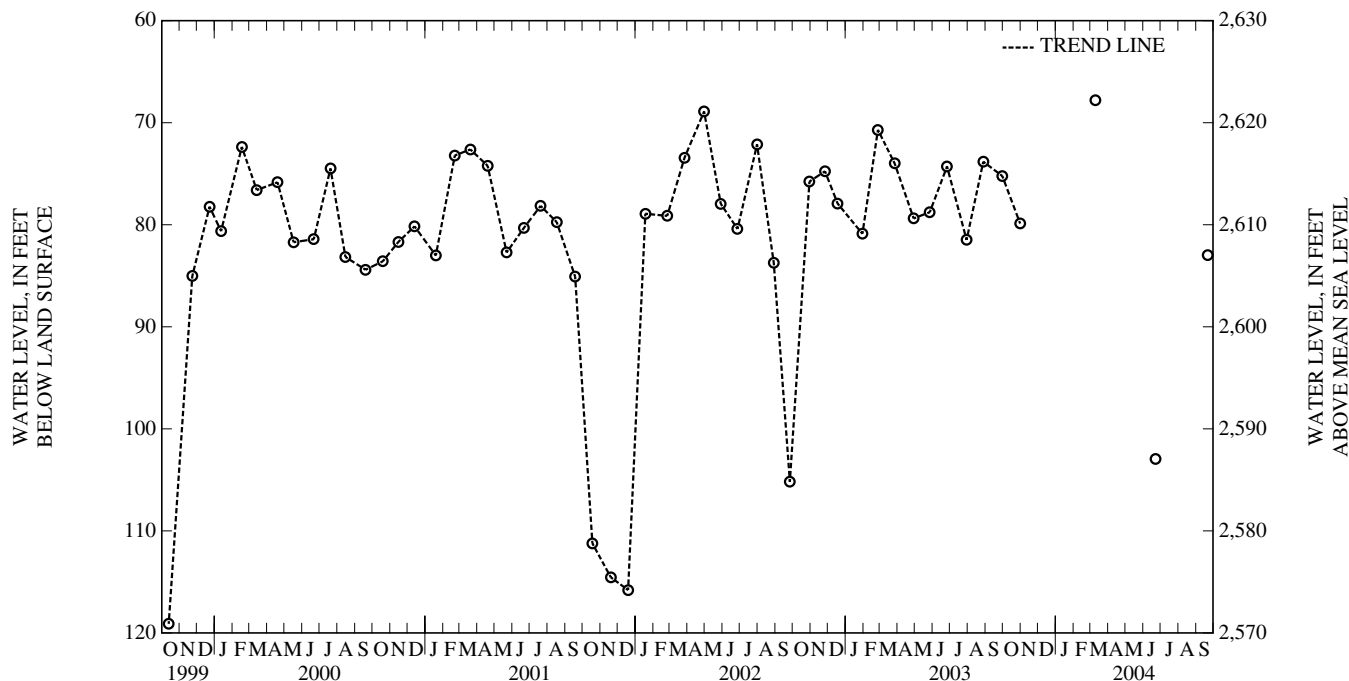
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.80 ft below land surface, March 10, 2004; lowest measured, 145.05 ft below land surface, September 22, 1988.

5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	79.88	MAR 10, 2004	67.80	JUN 22, 2004	102.95	SEP 21, 2004	82.98
HIGHEST 67.80 MAR 10, 2004							
LOWEST 102.95 JUN 22, 2004							



HARFORD COUNTY

WELL NUMBER.--HA Bd 31. SITE ID.--393902076160001.

LOCATION.--Lat 39°39'02", long 76°16'00", Hydrologic Unit 02050306, at Dublin. Owner: Private Residence.

AQUIFER.--Baltimore Gabbro Complex of Paleozoic age. Aquifer code: 300BLMR.

WELL CHARACTERISTICS.--Dug, stone-lined, water-table well, measured depth 25.9 ft; approximate diameter 36 in.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder from July 1954 to August 1958.

DATUM.--Elevation of land surface is 460 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of wood floor, 0.10 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

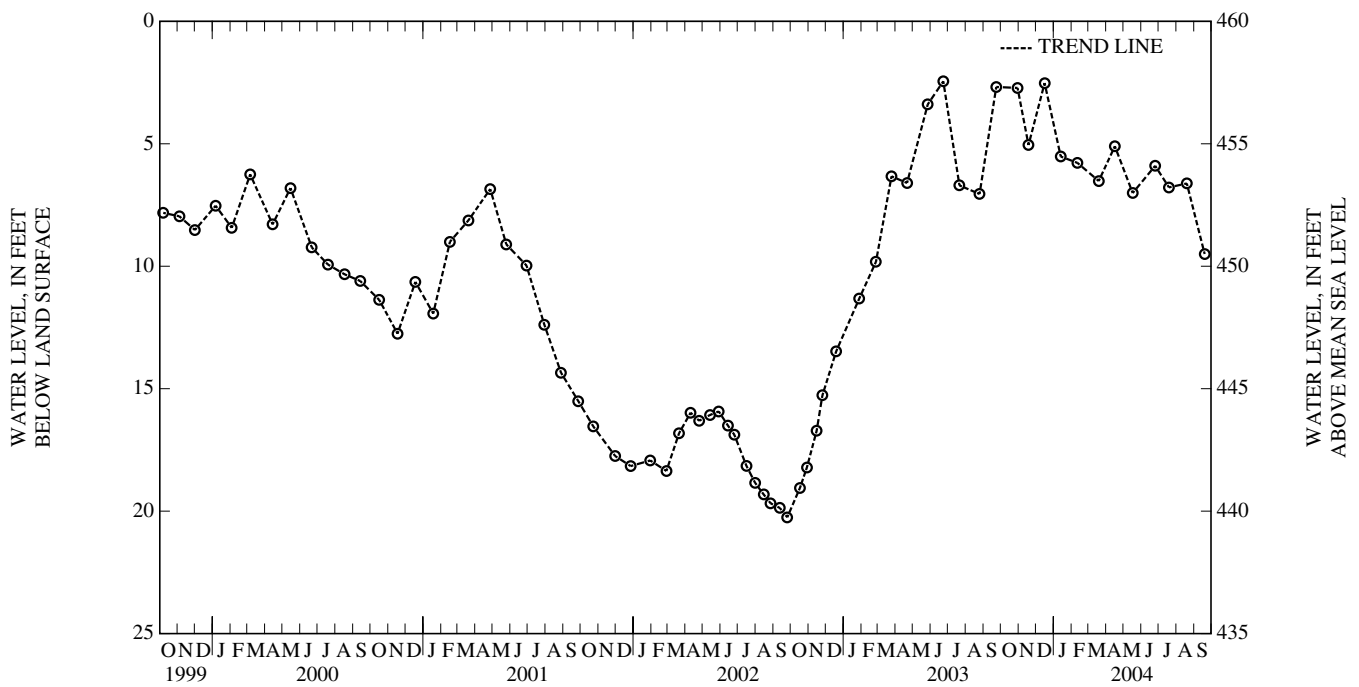
PERIOD OF RECORD.--May 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land surface, May 7, 1958; lowest measured, 20.25 ft below land surface, September 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	2.72	JAN 13, 2004	5.52	APR 16, 2004	5.10	JUL 19, 2004	6.78
NOV 18	5.05	FEB 11	5.78	MAY 17	7.01	AUG 19	6.62
DEC 16	2.52	MAR 19	6.52	JUN 25	5.90	SEP 19	9.50

HIGHEST 2.52 DEC 16, 2003
 LOWEST 9.50 SEP 19, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ca 23. SITE ID.--393158076302601. PERMIT NUMBER.--HA-73-1630.

LOCATION.--Lat 39°31'58", long 76°30'26", Hydrologic Unit 02060003, at Gunpowder State Park, Hess. Owner: U.S. Geological Survey.

AQUIFER.--Loch Raven Formation of Cambrian age. Aquifer code: 370LCRV.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 200 ft; casing diameter 6 in., to 24 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from July 1974 to September 1976.

DATUM.--Elevation of land surface is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.60 ft above land surface.

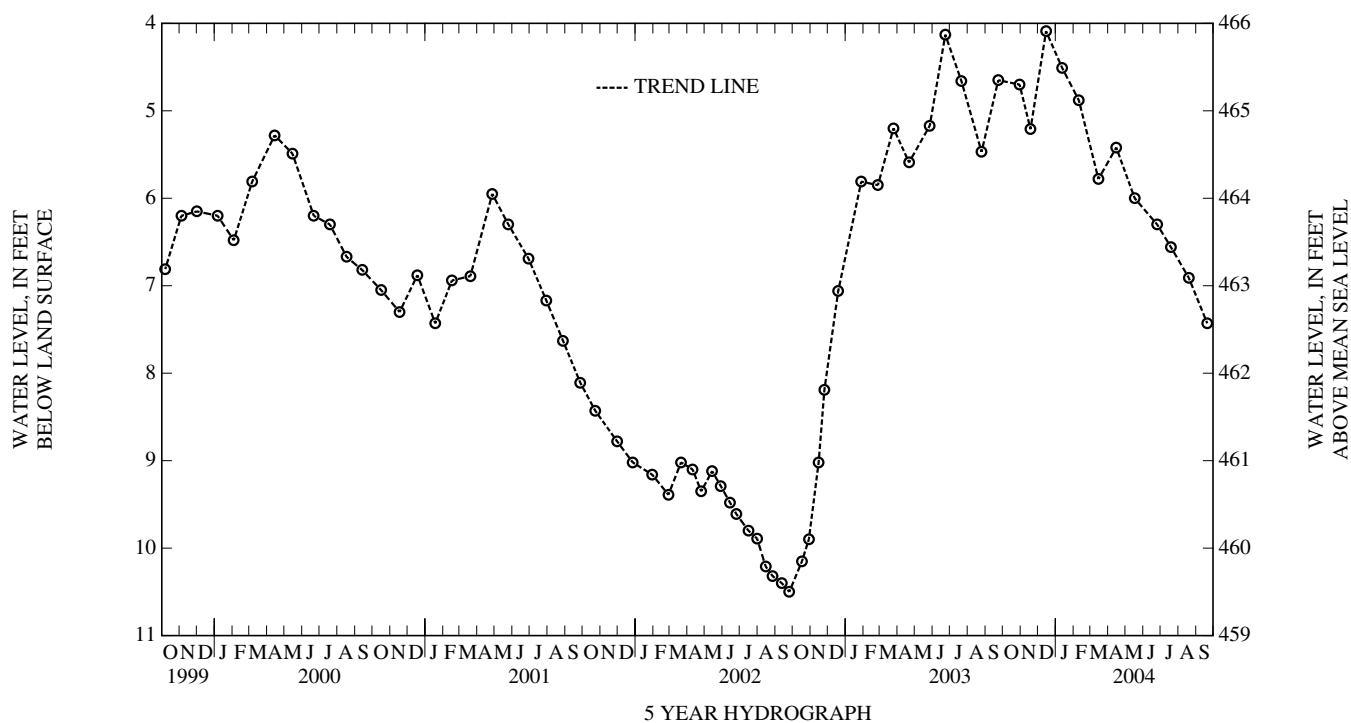
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.59 ft below land surface, September 27, 1975; lowest measured, 10.50 ft below land surface, September 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	4.70	JAN 12, 2004	4.51	APR 15, 2004	5.42	JUL 19, 2004	6.56
NOV 18	5.21	FEB 10	4.88	MAY 17	6.00	AUG 19	6.91
DEC 15	4.09	MAR 15	5.78	JUN 25	6.30	SEP 20	7.43
HIGHEST 4.09 DEC 15, 2003							
LOWEST 7.43 SEP 20, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA Dd 89. SITE ID.--392529076180901. PERMIT NUMBER.--HA-81-4130.

LOCATION.--Lat 39°25'29", long 76°18'09", Hydrologic Unit 02060003, at Edgewood Elementary School on Cedar Drive, Edgewood. Owner: Maryland Geological Survey.

AQUIFER.--Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 140 ft; casing diameter 4 in., to 96 ft, and 130 to 140 ft; screen diameter 4 in., from 96 to 106 ft, and 120 to 130 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements with chalked steel tape from October 1990 to January 1996 by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from January 1988 to July 1989.

DATUM.--Elevation of land surface is 99.05 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.80 ft above land surface.

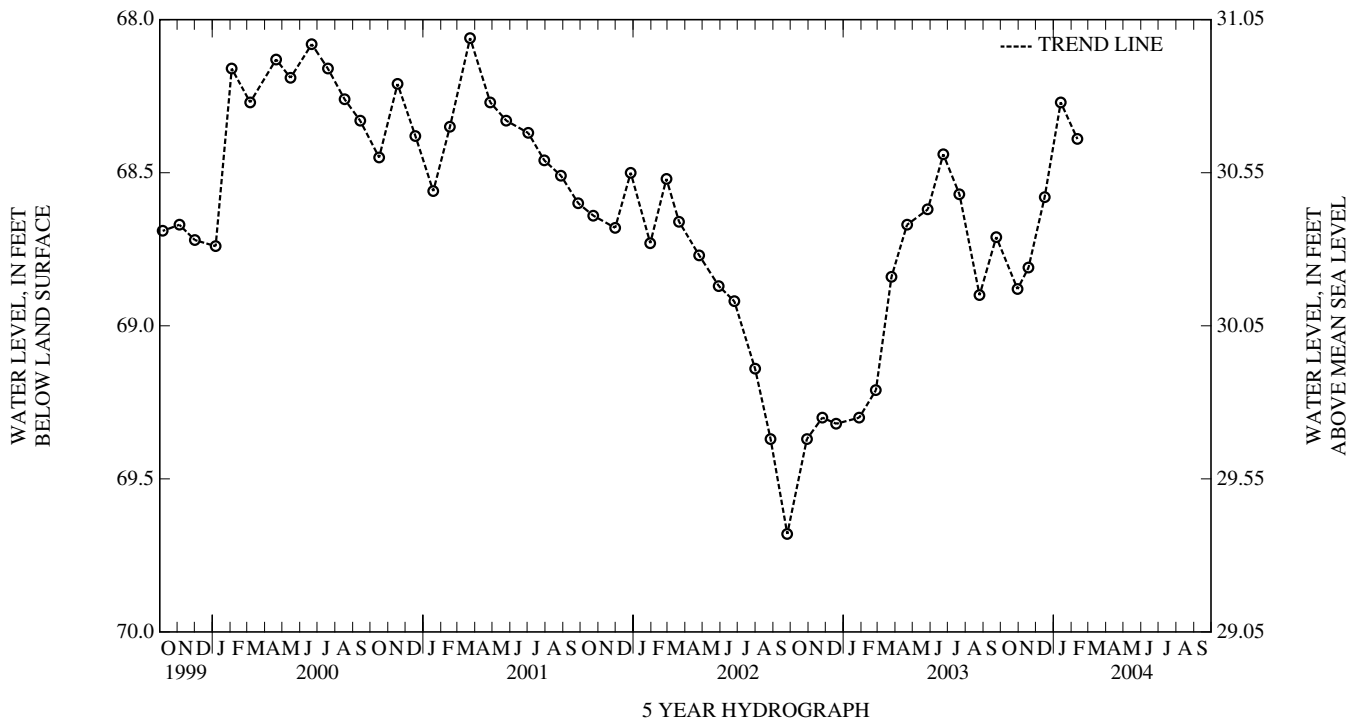
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--January 1988 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.28 ft below land surface, April 9, 1998; lowest measured, 69.68 ft below land surface, September 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	68.88	DEC 16, 2003	68.58	FEB 11, 2004	68.39
NOV 18	68.81	JAN 13, 2004	68.27		
HIGHEST 68.27 JAN 13, 2004					
LOWEST 69.68 OCT 30, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA Dd 91. SITE ID.--392721076150301. PERMIT NUMBER.--HA-81-4136.

LOCATION.--Lat 39°27'21", long 76°15'03", Hydrologic Unit 02060003, at William Longley Park, near intersection of Long Bar Harbor and Longley Roads, Long Bar Harbor. Owner: Maryland Geological Survey.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well (semi-confined), depth 78 ft; casing diameter 4 in., to 58 ft, and 68 to 78 ft; screen diameter 4 in., from 58 to 68 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 19.73 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.90 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

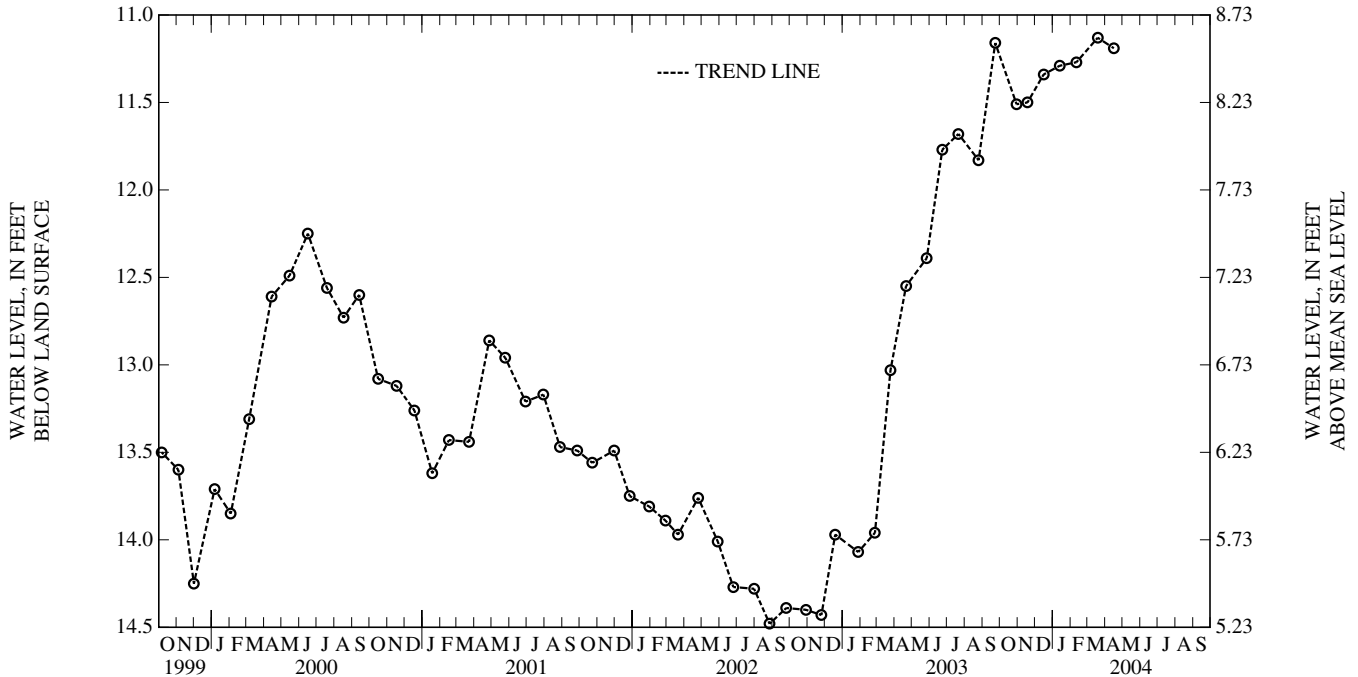
PERIOD OF RECORD.--May 1988 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.34 ft below land surface, May 6, 1997; lowest measured, 14.48 ft below land surface, August 27, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	11.51	DEC 16, 2003	11.34	FEB 11, 2004	11.27	APR 16, 2004	11.19
NOV 18	11.50	JAN 13, 2004	11.29	MAR 19	11.13		

HIGHEST 11.13 MAR 19, 2004
 LOWEST 11.51 OCT 30, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA Dd 92. SITE ID.--392721076150302. PERMIT NUMBER.--HA-81-4137.

LOCATION.--Lat 39°27'21", long 76°15'03", Hydrologic Unit 02060003, at William Longley Park, near intersection of Long Bar Harbor and Longley Roads, Long Bar Harbor. Owner: Maryland Geological Survey.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 38 ft; casing diameter 4 in., to 28 ft; screen diameter 4 in., from 28 to 38 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 20.06 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.12 ft above land surface.

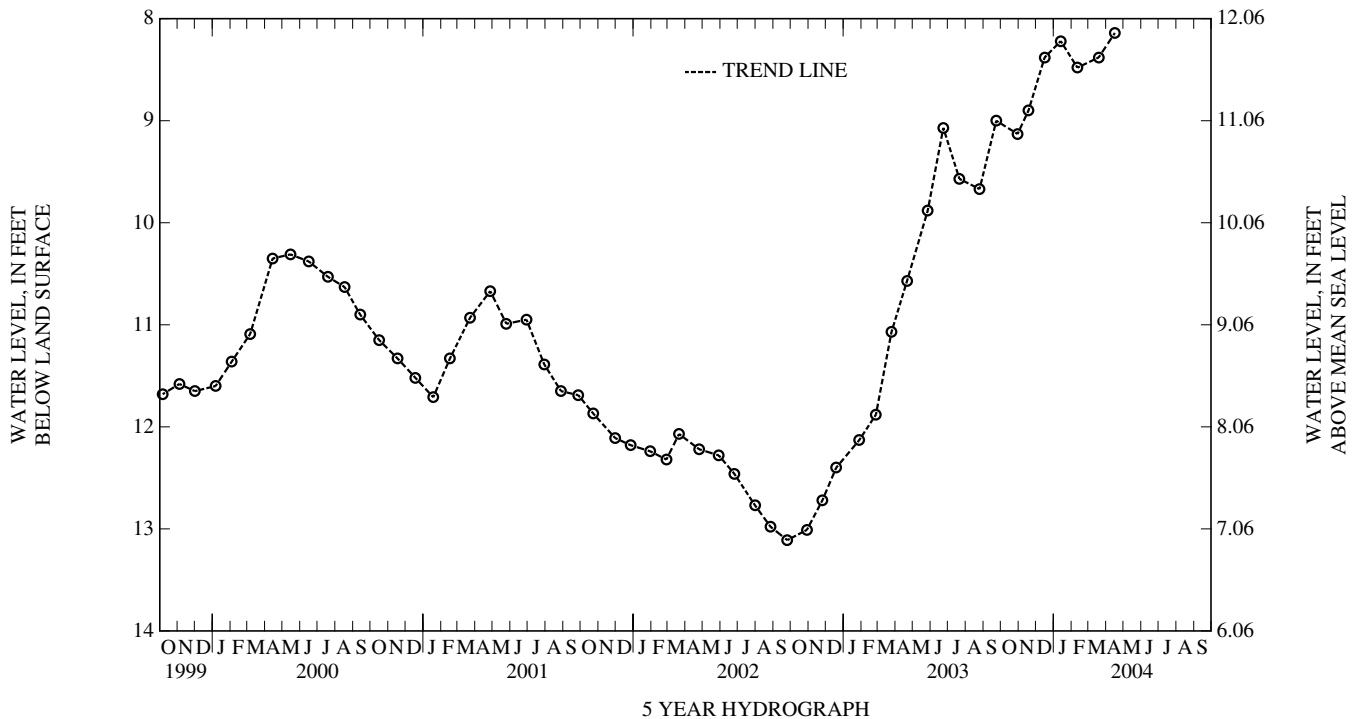
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--May 1988 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.35 ft below land surface, April 8, 1997. lowest measured, 13.11 ft below land surface, September 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	9.13	DEC 16, 2003	8.38	FEB 11, 2004	8.48	APR 16, 2004	8.14
NOV 18	8.90	JAN 13, 2004	8.22	MAR 19	8.38		
HIGHEST	8.14	APR 16, 2004					
LOWEST	9.13	OCT 30, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA De 66. SITE ID.--392921076100401. PERMIT NUMBER.--HA-69-0394.

LOCATION.--Lat 39°29'21", long 76°10'04", Hydrologic Unit 02060003, at Short Lane, near Aberdeen. Owner: Harford County Department of Public Works.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, unused, water-table well (semi-confined), depth 66 ft; casing diameter 4 in., to 45 ft; screen diameter 4 in., from 45 to 66 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1986 to July 1989.

DATUM.--Elevation of land surface is 67.75 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.61 ft above land surface.

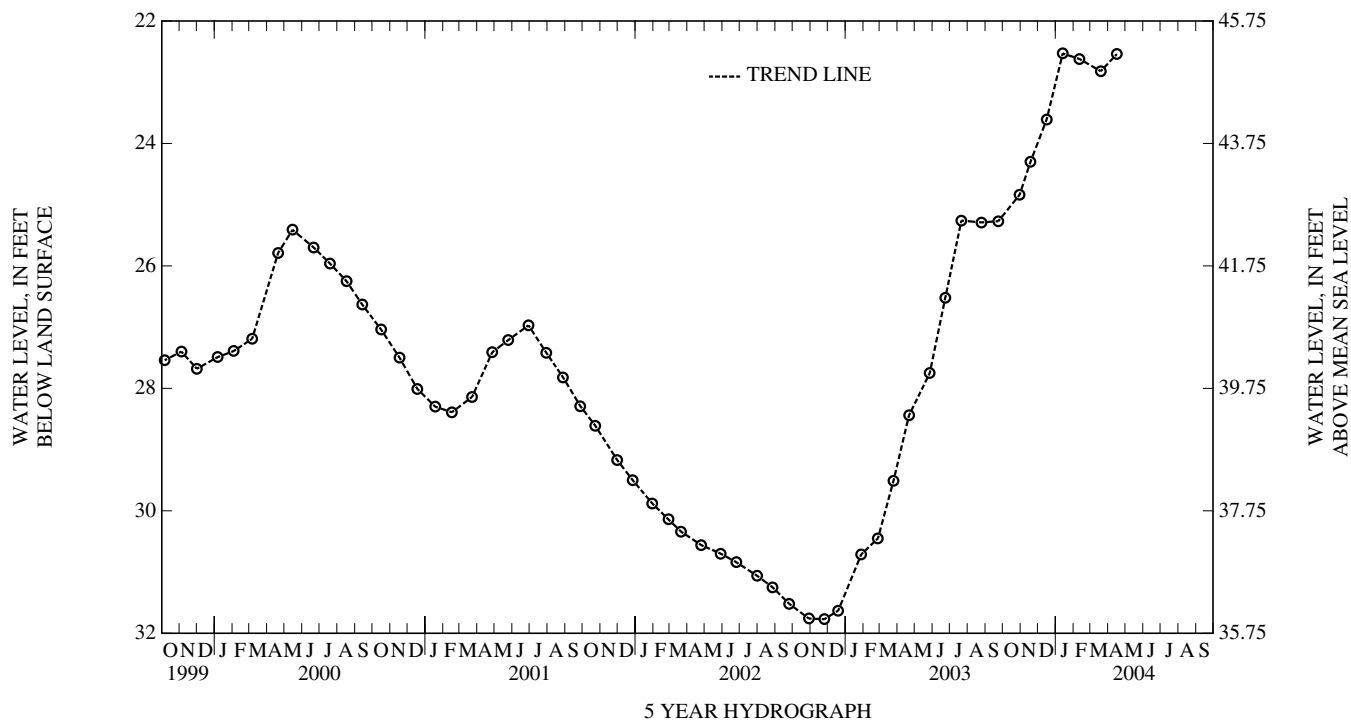
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1973 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.31 ft below land surface, July 28, 1975; lowest measured, 31.77 ft below land surface, November 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	24.84	DEC 16, 2003	23.61	FEB 11, 2004	22.62	APR 16, 2004	22.54
NOV 18	24.30	JAN 13, 2004	22.53	MAR 19	22.82		
HIGHEST 22.53 JAN 13, 2004							
LOWEST 24.84 OCT 30, 2003							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA De 181. SITE ID.--392606076145801. PERMIT NUMBER.--HA-81-4134.

LOCATION.--Lat 39°26'06", long 76°14'58", Hydrologic Unit 02060003, northeast end of Kennard Ave., at Willoughby Beach, Crestwood. Owner: Maryland Geological Survey.

AQUIFER.--Patuxent aquifer in the Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 290 ft; casing diameter 4 in., to 264 ft, 269 to 275 ft, and 280 to 290 ft; screen diameter 4 in., from 264 to 269 ft, and 275 to 280 ft.

INSTRUMENTATION.--Twice yearly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from May 1988 to July 1989.

DATUM.--Elevation of land surface is 12.22 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.10 ft above land surface.

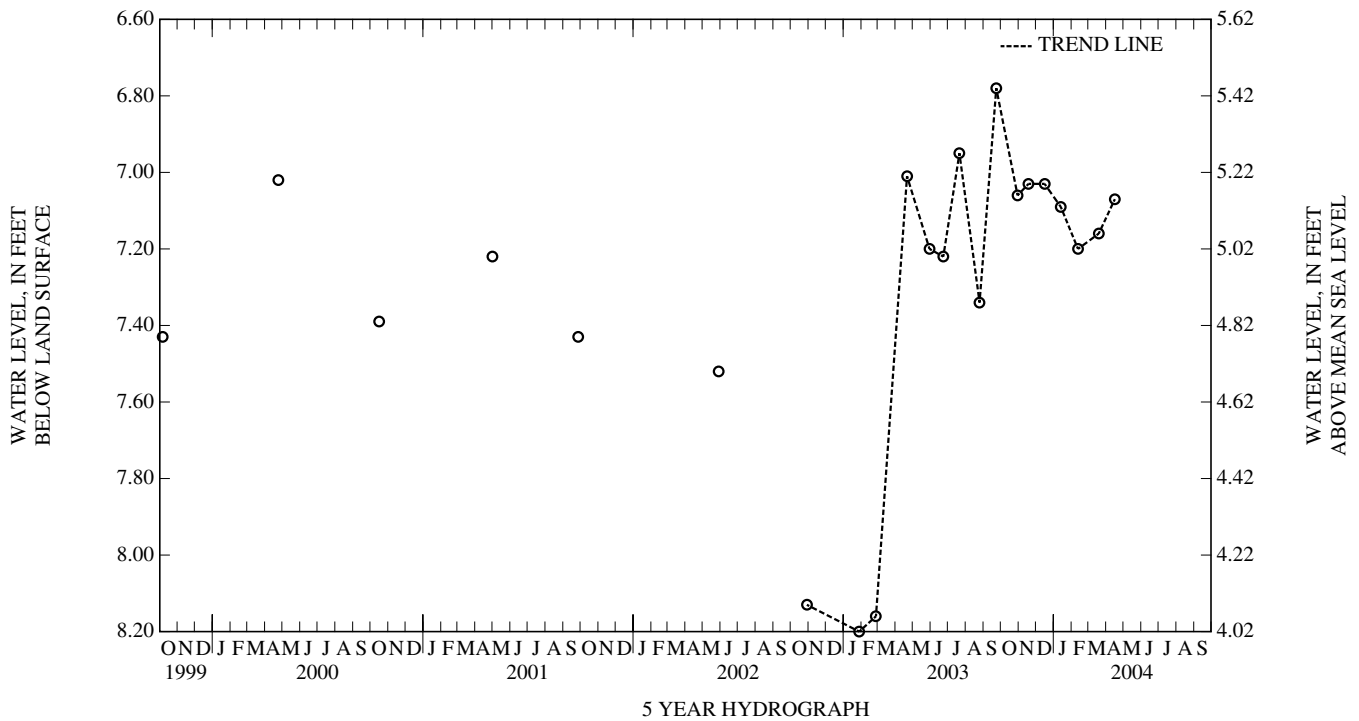
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--May 1988 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.42 ft below land surface, April 8, 1997; lowest measured, 8.20 ft below land surface, January 28, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	7.06	DEC 16, 2003	7.03	FEB 12, 2004	7.20	APR 16, 2004	7.07
NOV 18	7.03	JAN 13, 2004	7.09	MAR 19	7.16		
HIGHEST	7.03	NOV 18, 2003	DEC 16, 2003				
LOWEST	7.20	FEB 12, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA De 182. SITE ID.--392606076145802. PERMIT NUMBER.--HA-81-4135.

LOCATION.--Lat 39°26'06", long 76°14'58", Hydrologic Unit 02060003, northeast end of Kennard Ave., at Willoughby Beach, Crestwood. Owner: Maryland Geological Survey.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 50 ft; casing diameter 4 in., to 30 ft, and 40 to 50 ft; screen diameter 4 in., from 30 to 40 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from July 1988 to July 1989. Twice yearly water level measurements from May 1988 to January 2003.

DATUM.--Elevation of land surface is 12.29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.52 ft above land surface.

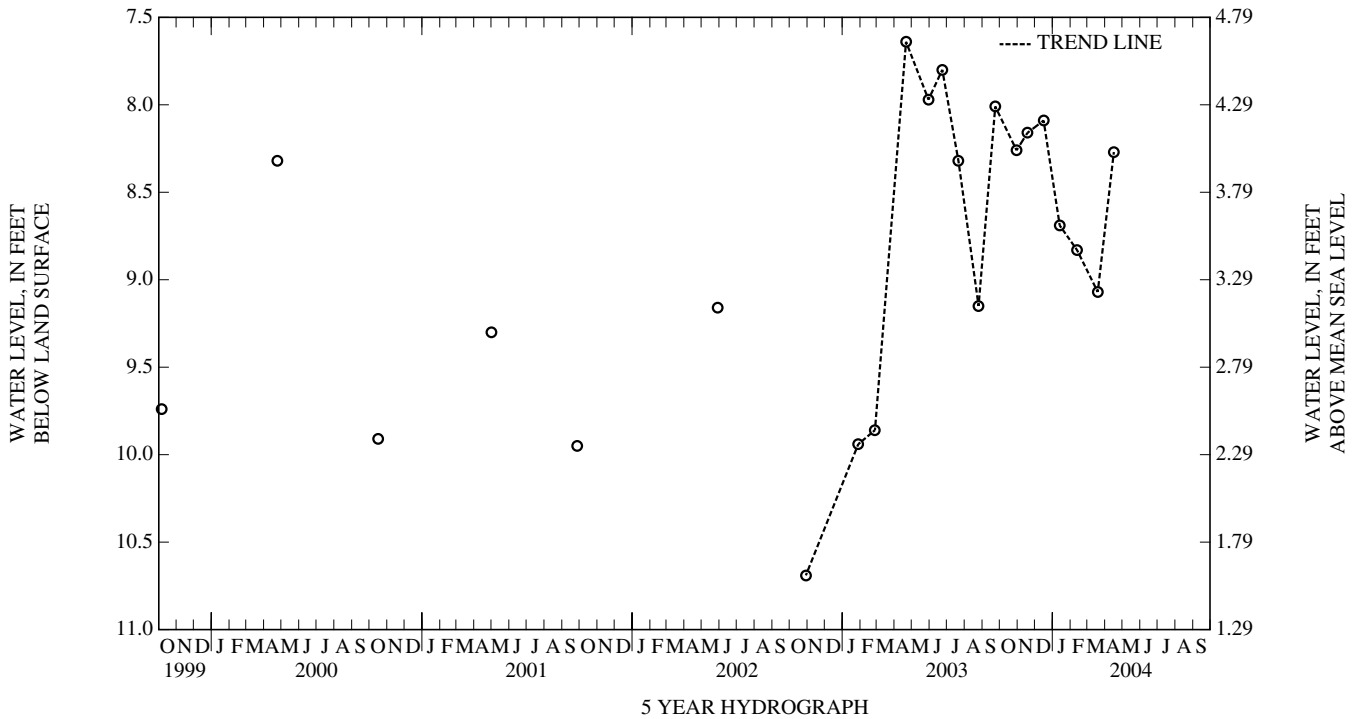
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--May 1988 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.64 ft below land surface, April 21, 2003; lowest measured, 11.04 ft below land surface, October 5, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	8.26	DEC 16, 2003	8.09	FEB 12, 2004	8.83	APR 16, 2004	8.27
NOV 18	8.16	JAN 13, 2004	8.69	MAR 19	9.07		
HIGHEST 8.09 DEC 16, 2003							
LOWEST 9.07 MAR 19, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY—Continued

WELL NUMBER.--HA De 183. SITE ID.--392606076145803. PERMIT NUMBER.--HA-81-4577.

LOCATION.--Lat 39°26'06", long 76°14'58", Hydrologic Unit 02060003, northeast end of Kennard Ave., at Willoughby Beach, Crestwood. Owner: Maryland Geological Survey.

AQUIFER.--Patuxent aquifer in the Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 175 ft; casing diameter 4 in., to 155 ft, and 165 to 175 ft; screen diameter 4 in., from 155 to 165 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from May 1988 to July 1989. Twice yearly water level measurements from May 1988 to July 1989, and April 1990 to January 2003.

DATUM.--Elevation of land surface is 12.53 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.54 ft above land surface.

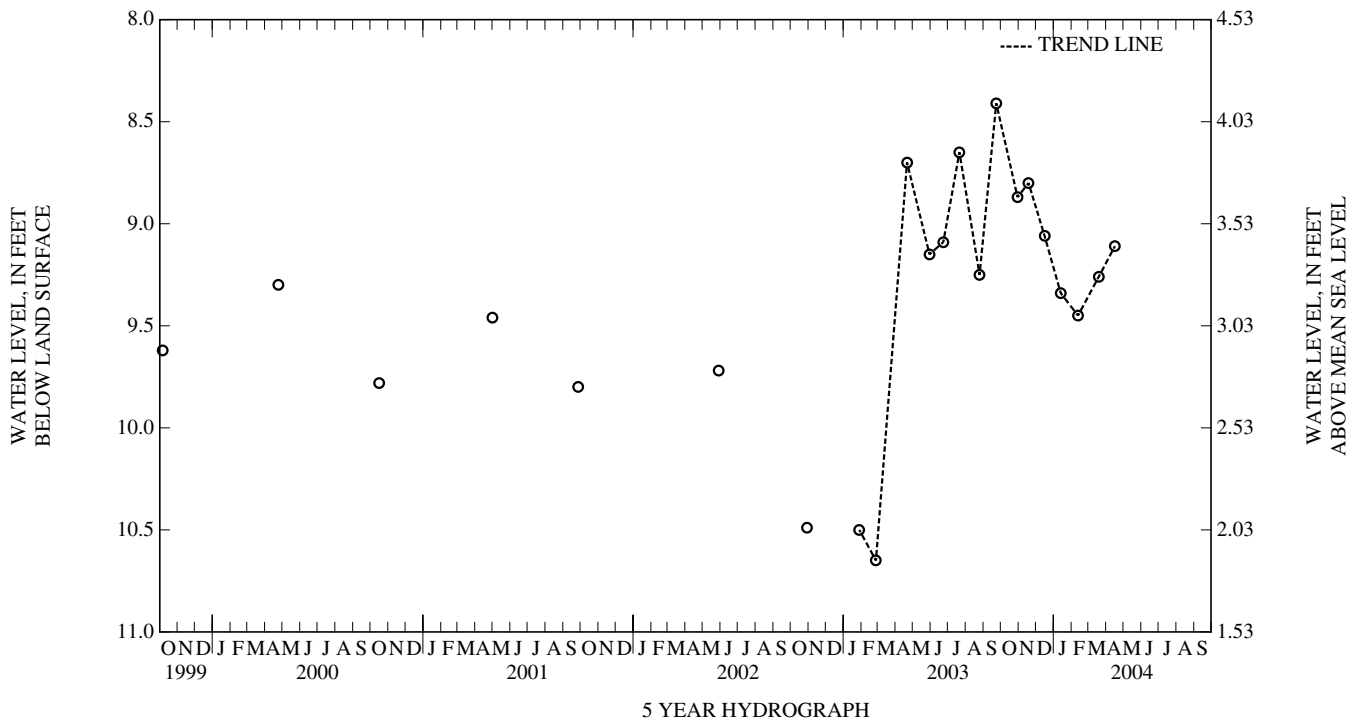
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--May 1988 to July 1989, April 1990 to April 2004 (discontinued) .

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.41 ft below land surface, September 23, 2003; lowest measured, 10.65 ft below land surface, February 26, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	8.87	DEC 16, 2003	9.06	FEB 12, 2004	9.45	APR 16, 2004	9.11
NOV 18	8.80	JAN 13, 2004	9.34	MAR 19	9.26		
HIGHEST	8.80	NOV 18, 2003					
LOWEST	9.45	FEB 12, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA De 195. SITE ID.--392914076110301. PERMIT NUMBER.--HA-81-4142.

LOCATION.--Lat 39°29'14", long 76°11'03", Hydrologic Unit 02060003, 0.2 mi east on Cranberry Run Dr., near Perryman. Owner: Maryland Geological Survey.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TBLT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 55 ft; casing diameter 4 in., to 35 ft; and 45 to 55 ft; screen diameter 4 in., from 35 to 45 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Monthly water level measurements from May 1988 to July 1989. Twice yearly water level measurements from May 1988 to January 2003.

DATUM.--Elevation of land surface is 52.70 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.38 ft above land surface.

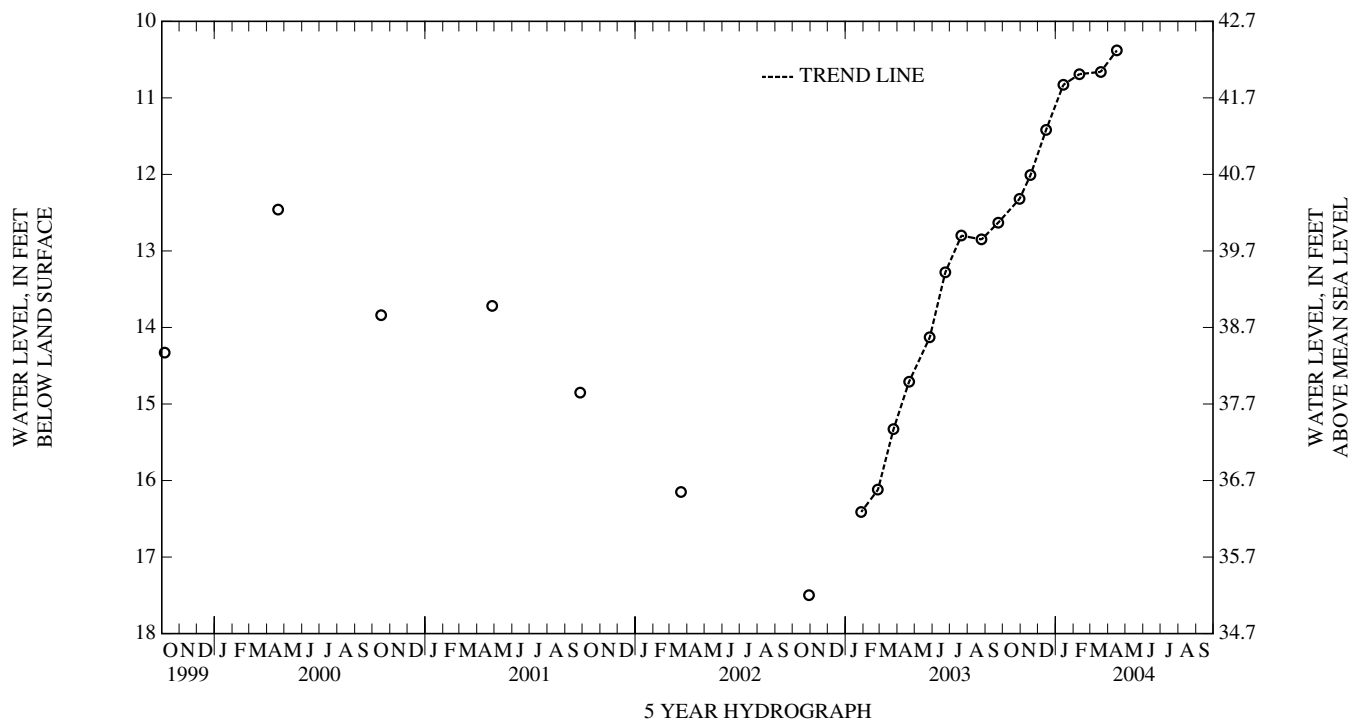
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--May 1988 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.96 ft below land surface, April 8, 1997; lowest measured, 17.50 ft below land surface, October 29, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	12.32	DEC 15, 2003	11.42	FEB 11, 2004	10.69	APR 16, 2004	10.38
NOV 18	12.01	JAN 14, 2004	10.83	MAR 19	10.66		
HIGHEST 10.38 APR 16, 2004							
LOWEST 12.32 OCT 30, 2003							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA De 198. SITE ID.--392819076130902. PERMIT NUMBER.--HA-81-4141.

LOCATION.--Lat 39°28'19", long 76°13'09", Hydrologic Unit 02060003, northwest end of Fords Lane, Perryman. Owner: Private Residence (formerly Maryland Geological Survey).

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 4 in., to 9 ft; screen diameter 4 in. from 9 to 19 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval from January 1989 to July 1989, and from January 1991 to February 2003.

DATUM.--Elevation of land surface is 18.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.50 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--May 1988 to current year.

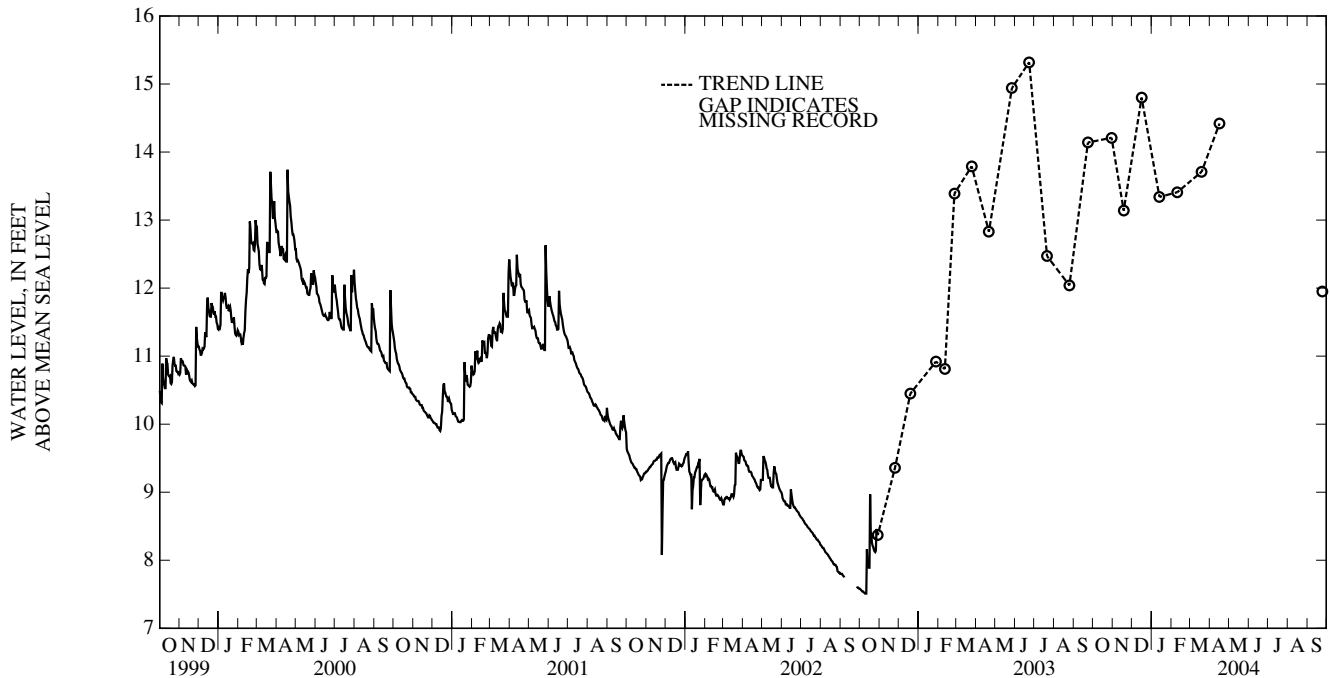
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.57 ft above sea level, September 16, 1999 (recorder); lowest measured, 7.59 ft above sea level, September 25, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	14.21	DEC 16, 2003	14.80	FEB 10, 2004	13.41	APR 16, 2004	14.42
NOV 18	13.14	JAN 13, 2004	13.34	MAR 19	13.71	SEP 24	11.95

LOWEST 11.95 SEP 24, 2004
 HIGHEST 14.80 DEC 16, 2003

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ec 11. SITE ID.--392435076203301. PERMIT NUMBER.--HA-04-7211.

LOCATION.--Lat 39°24'35", long 76°20'33", Hydrologic Unit 02060003, off Trimble Road, Joppatowne. Owner: Harford County Department of Public Works.

AQUIFER.--Patuxent aquifer in the Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 68 ft; diameter of casing 6 in., to 63 ft; screen diameter 2 in., from 63 to 68 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder from May 1962 to December 1983.

DATUM.--Elevation of land surface is 11.7 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.50 ft above land surface.

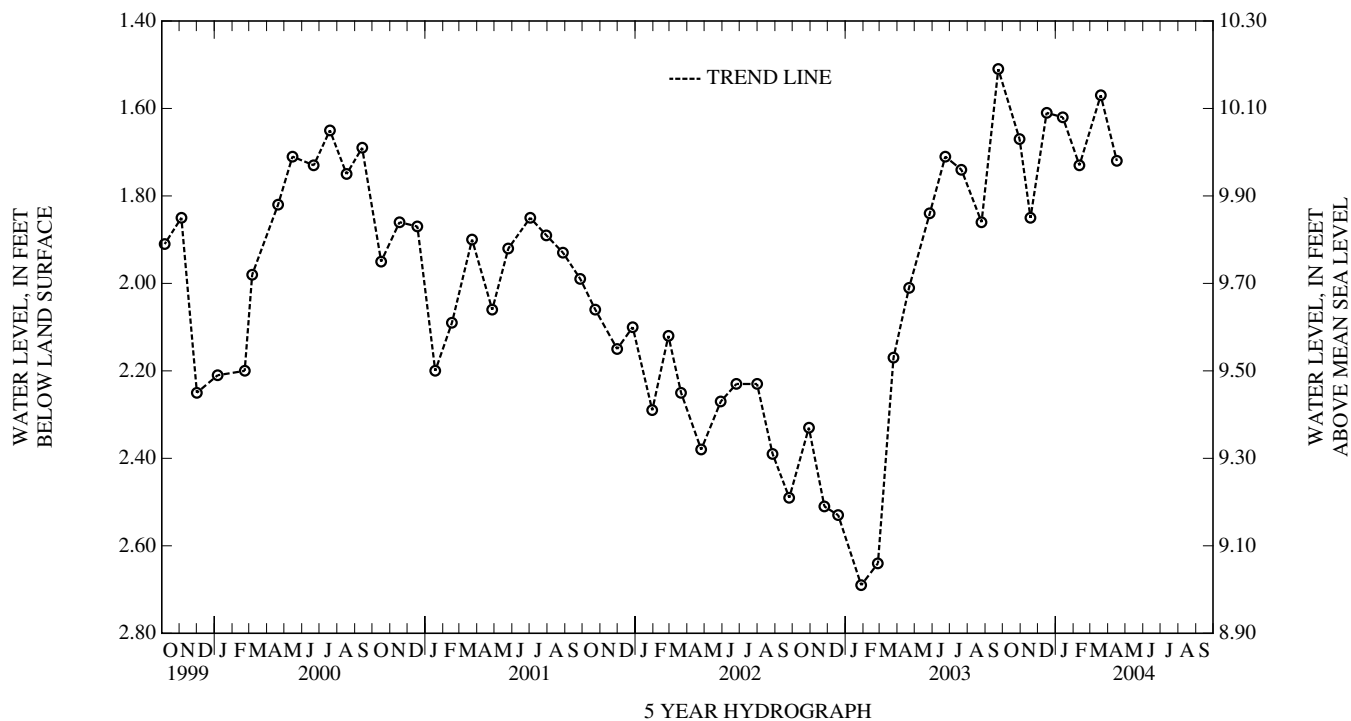
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--May 1962 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.13 ft below land surface, May 24, 1962; lowest measured, 12.80 ft below land surface, May 26, 1972.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	1.67	DEC 16, 2003	1.61	FEB 11, 2004	1.73	APR 16, 2004	1.72
NOV 18	1.85	JAN 13, 2004	1.62	MAR 19	1.57		
HIGHEST	1.57	MAR 19, 2004					
LOWEST	1.85	NOV 18, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ec 46. SITE ID.--392408076210101. PERMIT NUMBER.--HA-81-4124.

LOCATION.--Lat 39°24'08", long 76°21'01", Hydrologic Unit 02060003, at end of Kearney Dr., at Copenhaven Park, near Joppatowne. Owner: Maryland Geological Survey.

AQUIFER.--Patuxent aquifer in the Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 85 ft; diameter of casing 4 in., to 65 ft, and 75 to 85 ft; screen diameter 4 in., from 65 to 75 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1989 to October 1995.

DATUM.--Elevation of land surface is 23.16 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.17 ft above land surface.

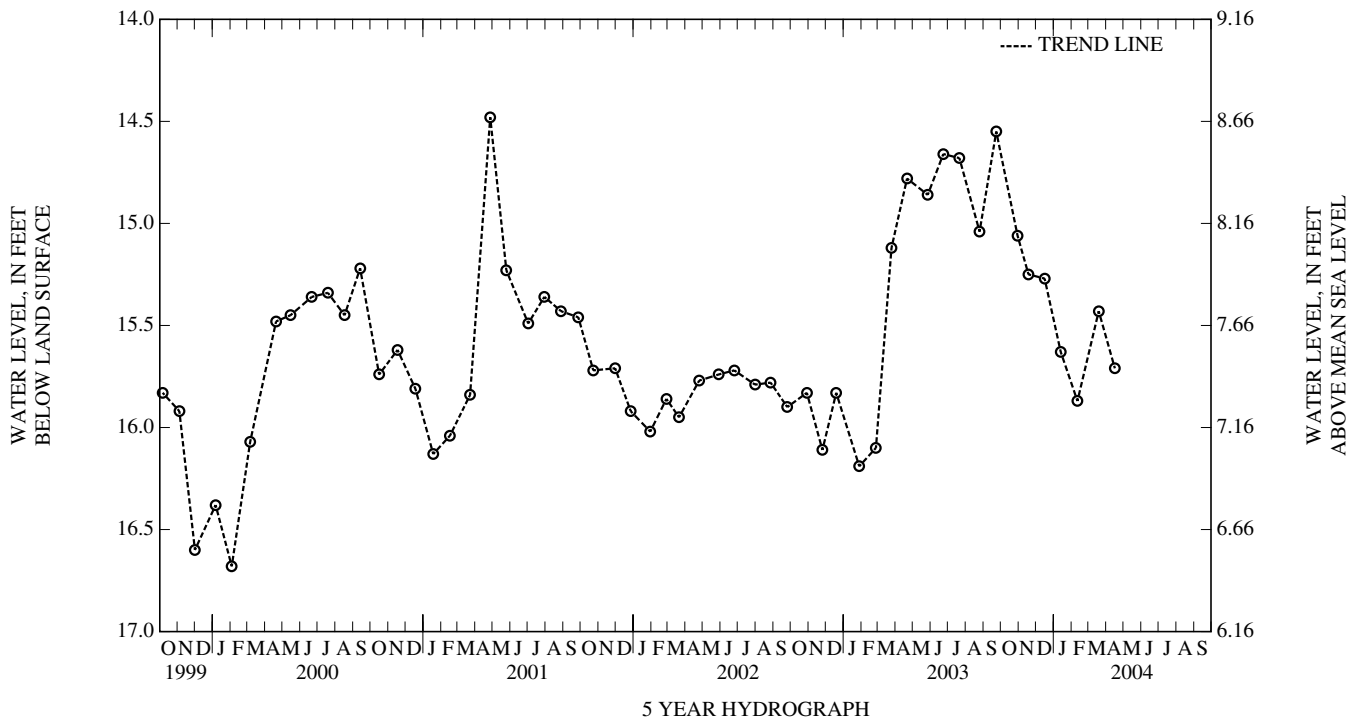
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--May 1988 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.48 ft below land surface, April 27, 2001; lowest measured, 16.76 ft below land surface, February 23, 1989.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	15.06	DEC 16, 2003	15.27	FEB 11, 2004	15.87	APR 16, 2004	15.71
NOV 18	15.25	JAN 13, 2004	15.63	MAR 19	15.43		
HIGHEST 15.06 OCT 30, 2003							
LOWEST 15.87 FEB 11, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 47. SITE ID.--392455076192101. PERMIT NUMBER.--HA-81-4128.

LOCATION.--Lat 39°24'55", long 76°19'21", Hydrologic Unit 02060003, 0.2 mi east of intersection of MD Rt. 152 and Trimble Road, Edgewood Park.
Owner: Maryland Geological Survey.

AQUIFER.--Patuxent aquifer in the Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 210 ft; casing diameter 4 in., to 190 ft, and 200 to 210 ft; screen diameter 4 in., from 190 to 200 ft.

INSTRUMENTATION.--Monthly water level measurement with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 90.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.29 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

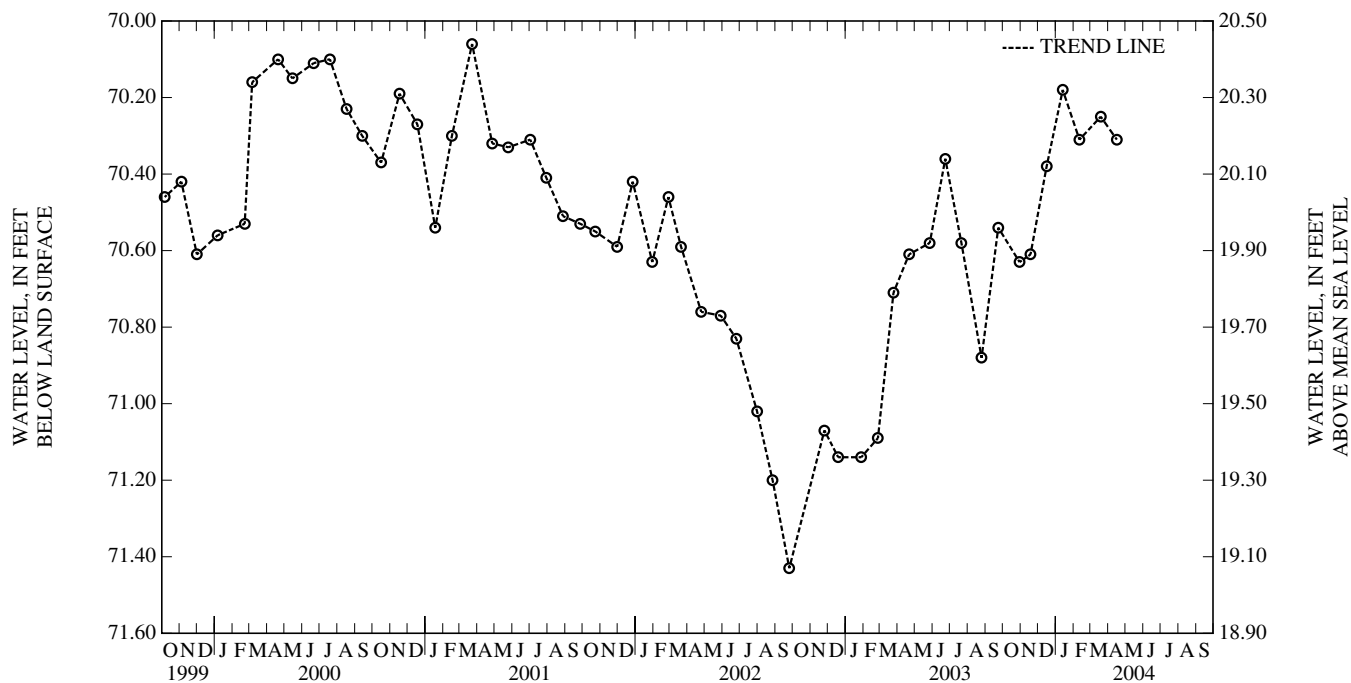
PERIOD OF RECORD.--May 1988 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.34 ft below land surface, January 3, 1997; lowest measured, 72.02 ft below land surface, November 9, 1988.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	70.63	DEC 16, 2003	70.38	FEB 11, 2004	70.31	APR 16, 2004	70.31
NOV 18	70.61	JAN 13, 2004	70.18	MAR 19	70.25		

HIGHEST 70.18 JAN 13, 2004
LOWEST 70.63 OCT 30, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 48. SITE ID.--392455076192102. PERMIT NUMBER.--HA-81-4578.

LOCATION.--Lat 39°24'55", long 76°19'21", Hydrologic Unit 02060003, 0.2 mi east of intersection of MD Rt. 152 and Trimble Road, Edgewood Park.
 Owner: Maryland Geological Survey.

AQUIFER.--Patuxent aquifer in the Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 133 ft; casing diameter 4 in., to 118 ft, and 128 to 133 ft; screen diameter 4 in., from 118 to 128 ft.

INSTRUMENTATION.--Monthly water level measurement with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 91.20 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.58 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

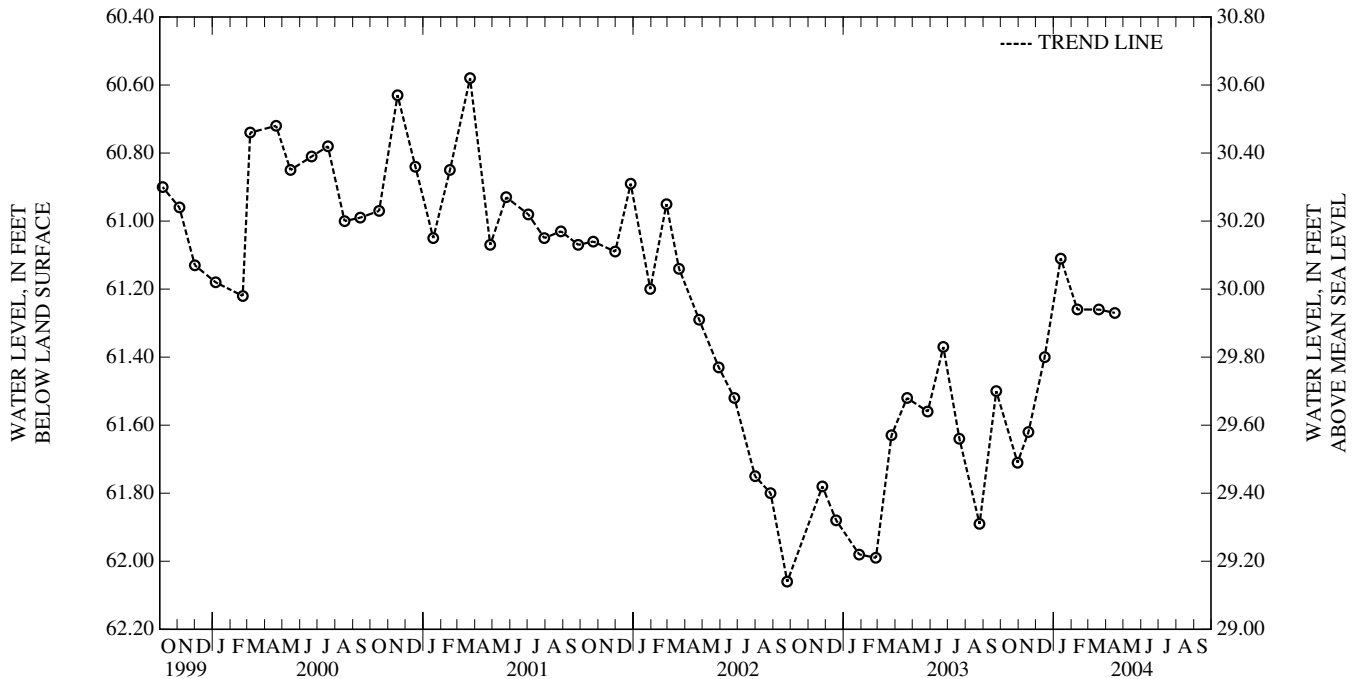
PERIOD OF RECORD.--May 1988 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.70 ft below land surface, April 9, 1998; lowest measured, 63.00 ft below land surface, May 12, 1988.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	61.71	DEC 16, 2003	61.40	FEB 11, 2004	61.26	APR 16, 2004	61.27
NOV 18	61.62	JAN 13, 2004	61.11	MAR 19	61.26		

HIGHEST 61.11 JAN 13, 2004
 LOWEST 61.71 OCT 30, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 49. SITE ID.--392455076192103. PERMIT NUMBER.--HA-81-4129.

LOCATION.--Lat 39°24'55", long 76°19'21", Hydrologic Unit 02060003, 0.2 mi east of the intersection of MD Rt. 152 and Trimble Road, Edgewood Park.
Owner: Maryland Geological Survey.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 28 ft; casing diameter 4 in., to 13 ft, and 23 to 28 ft; screen diameter 4 in., from 13 to 23 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from June 1988 to July 1989.

DATUM.--Elevation of land surface is 91.89 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.19 ft above land surface.

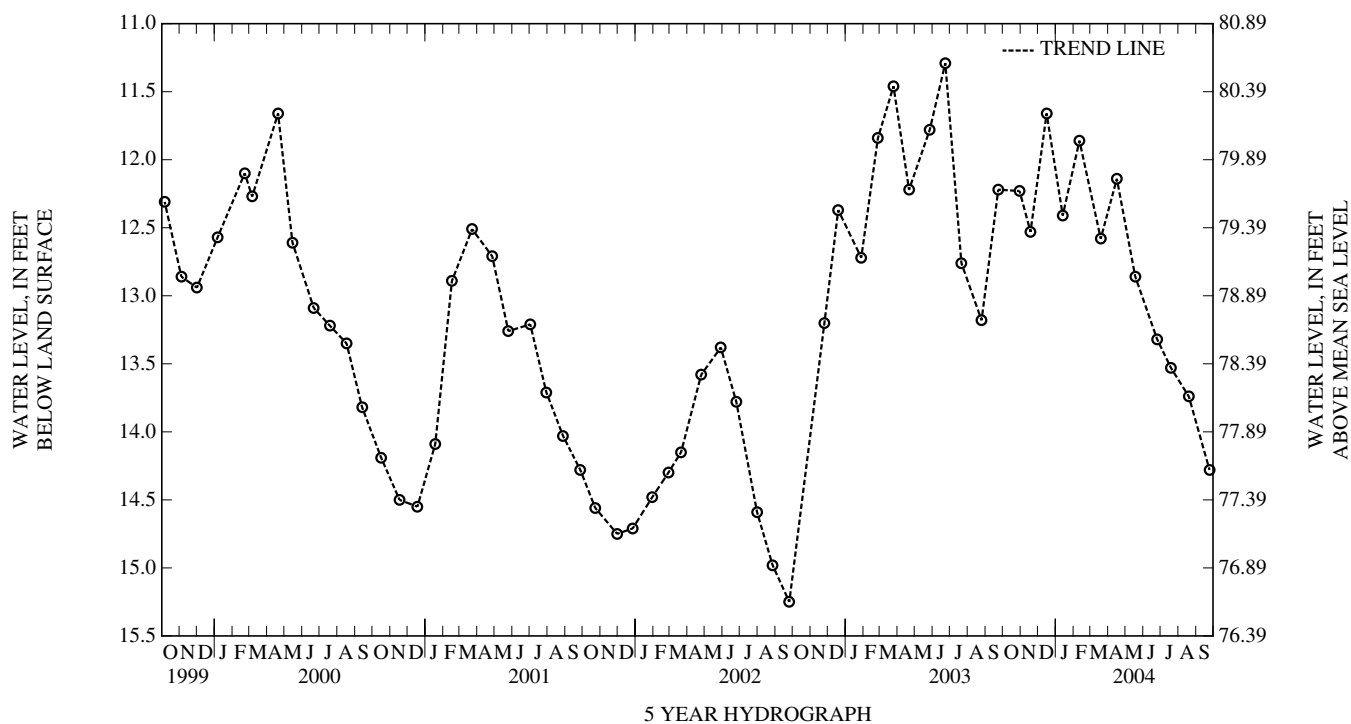
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--May 1988 to July 1995, January 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.29 ft below land surface, June 23, 2003; lowest measured, 15.25 ft below land surface, September 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	12.23	JAN 13, 2004	12.41	APR 16, 2004	12.14	JUL 19, 2004	13.53
NOV 18	12.53	FEB 11	11.86	MAY 18	12.86	AUG 19	13.74
DEC 16	11.66	MAR 19	12.58	JUN 25	13.32	SEP 24	14.28
HIGHEST 11.66 DEC 16, 2003							
LOWEST 14.28 SEP 24, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HOWARD COUNTY

WELL NUMBER.--HO Bd 1. SITE ID.--391910076565701.

LOCATION.--Lat 39°19'10", long 76°56'57", Hydrologic Unit 02060006, Slacks Corner near MD Rt. 32 and MD Rt. 99. Owner: Maryland State Highway Administration.

AQUIFER.--Morgan Run Formation of Ordovician age. Aquifer code: 360MRGR.

WELL CHARACTERISTICS.--Dug, stone-lined, observation, water-table well, measured depth 48 ft; diameter 60 in.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 630 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Hole in center of steel plate well cover, 0.40 ft above land surface.

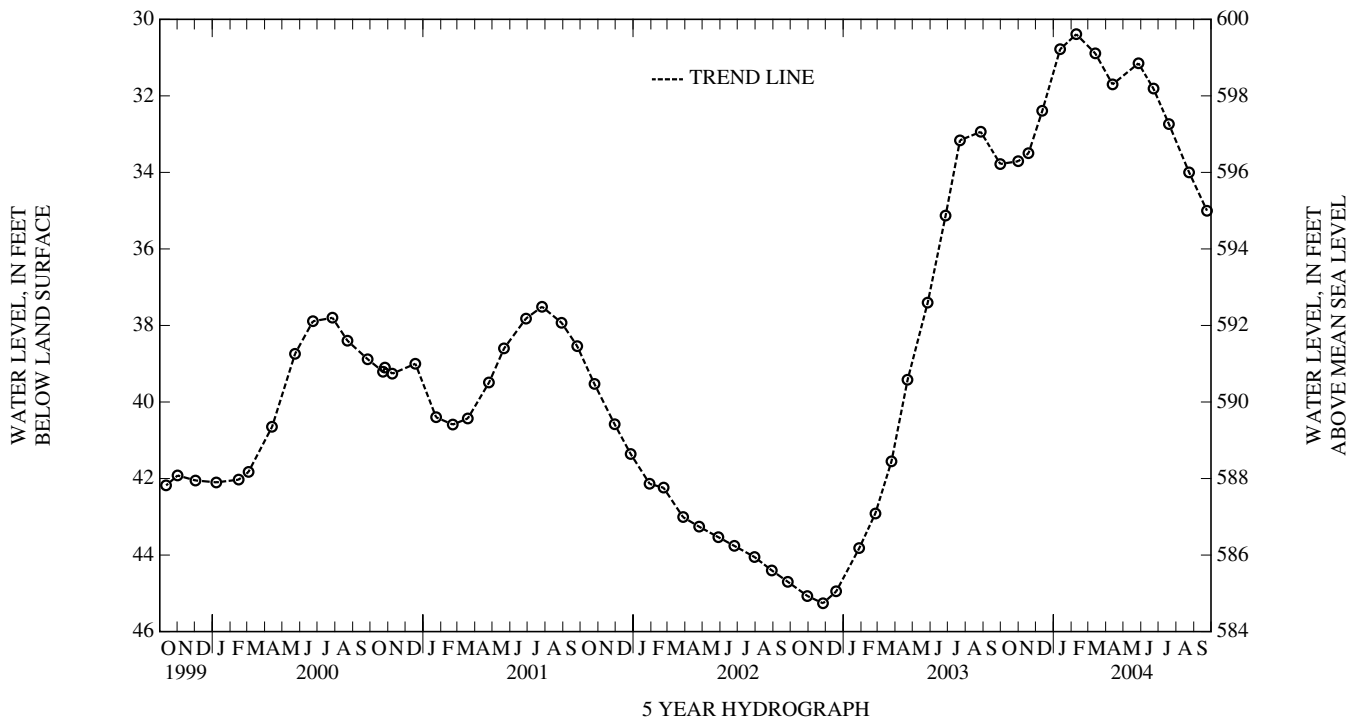
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.76 ft below land surface, July 3, 1972; lowest measured, 46.88 ft below land surface, September 10, 1966.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	33.71	JAN 12, 2004	30.78	APR 12, 2004	31.70	JUL 19, 2004	32.74
NOV 18	33.50	FEB 09	30.39	MAY 27	31.15	AUG 23	34.00
DEC 12	32.39	MAR 13	30.89	JUN 22	31.81	SEP 23	35.00
HIGHEST 30.39 FEB 09, 2004							
LOWEST 35.00 SEP 23, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HOWARD COUNTY--Continued

WELL NUMBER.--HO Cd 79. SITE ID.--391445076555101. PERMIT NUMBER.--HO-81-2387.

LOCATION.--Lat 39°14'45", long 76°55'51", Hydrologic Unit 02060006, at University of Maryland Central Farm. Owner: U.S. Geological Survey.

AQUIFER.--Loch Raven Formation (saprolite) of Cambrian age. Aquifer code: 370LCRV.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 54 ft; casing diameter 3 in., to 44 ft; screen diameter 3 in., from 44 to 54 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 452.37 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.05 ft above land surface.

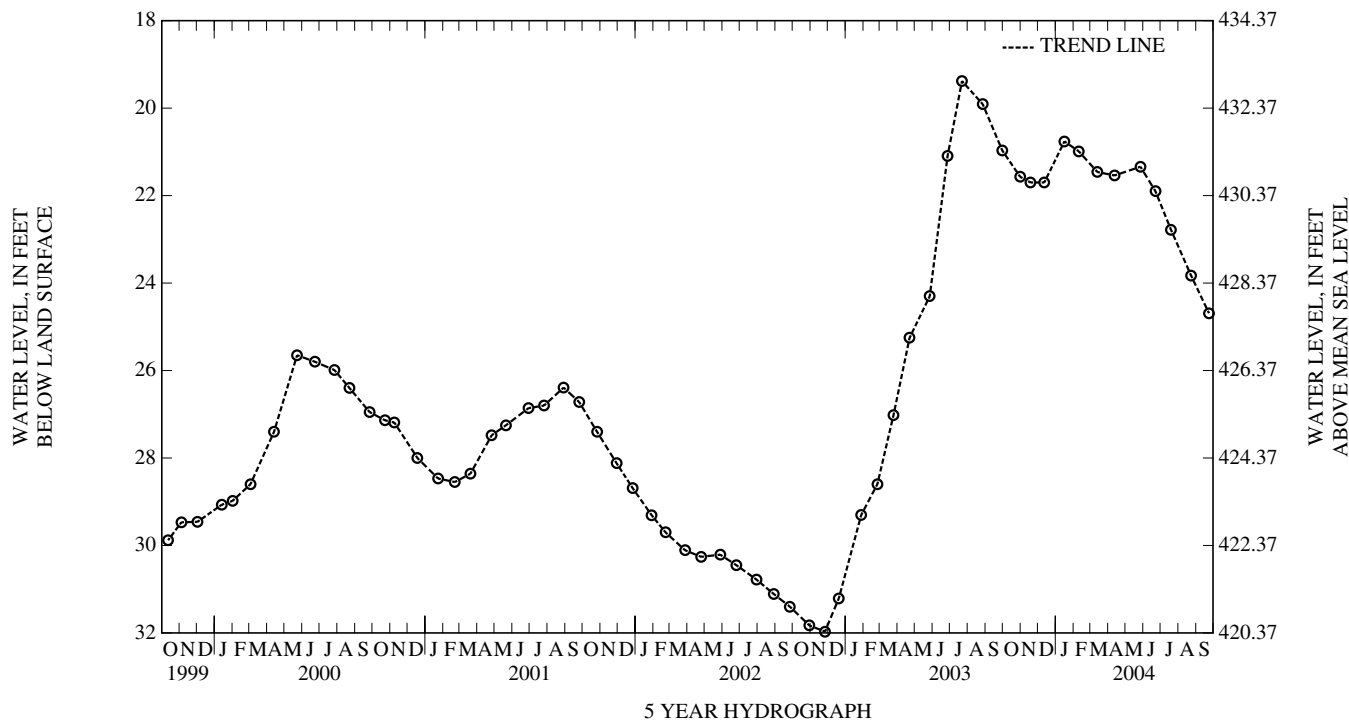
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--January 1988 to May 1993, November 1995, January 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.20 ft below land surface, April 10, 1997; lowest measured, 31.97 ft below land surface, November 26, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	21.57	JAN 16, 2004	20.76	APR 12, 2004	21.54	JUL 19, 2004	22.78
NOV 18	21.70	FEB 10	20.99	MAY 27	21.34	AUG 23	23.83
DEC 12	21.70	MAR 13	21.46	JUN 22	21.90	SEP 23	24.69
HIGHEST 20.76 JAN 16, 2004							
LOWEST 24.69 SEP 23, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

HOWARD COUNTY--Continued

WELL NUMBER.--HO Ce 38. SITE ID.--391001076540001. PERMIT NUMBER.--HO-01-1827.

LOCATION.--Lat 39°10'01", long 76°54'00", Hydrologic Unit 02060006, at Johns Hopkins University Applied Physics Lab, Scaggsville. Owner: Johns Hopkins University.

AQUIFER.--Sykesville Formation (Sykesville Schist Member) of Ordovician age. Aquifer code: 360SKVL.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 125 ft; casing diameter 6 in., to 51.4 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from December 1987 to April 1990.

DATUM.--Elevation of land surface is 430 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.45 ft below land surface.

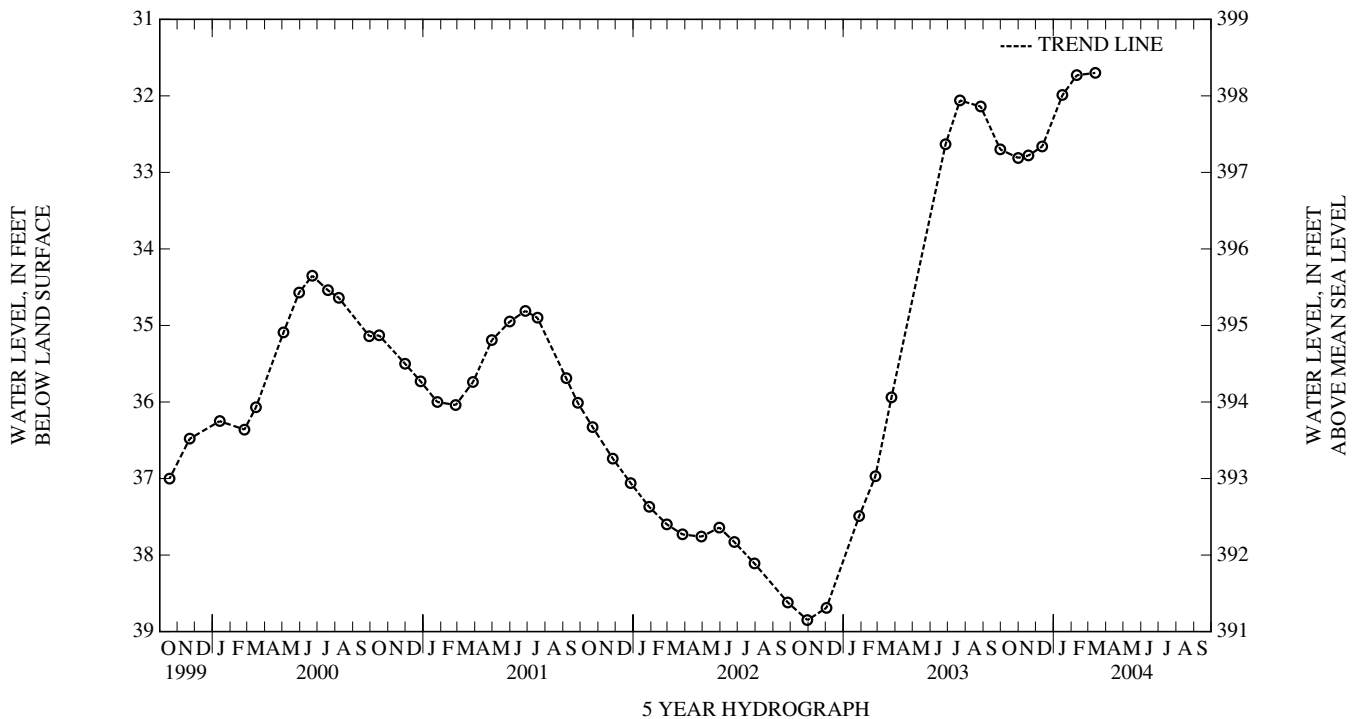
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--May 1956 to March 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.84 ft below land surface, May 5, 1972; lowest measured, 38.85 ft below land surface, October 30, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	32.81	DEC 12, 2003	32.66	FEB 10, 2004	31.73
NOV 18	32.78	JAN 16, 2004	31.99	MAR 13	31.70
HIGHEST 31.70 MAR 13, 2004					
LOWEST 32.81 OCT 31, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY

WELL NUMBER.--KE Ac 20. SITE ID.--392007076075501. PERMIT NUMBER.--KE-73-0658.

LOCATION.--Lat 39°20'07", long 76°07'55", Hydrologic Unit 02060001, at U.S. Coast Guard Station at end of Still Pond Neck Road. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 582 ft; casing diameter 10 in., to 73 ft; casing diameter 4 in., to 550 ft, and 560 to 582 ft; screen diameter 4 in., from 550 to 560 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly measurements from October 1986 to April 1991.

DATUM.--Elevation of land surface is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.30 ft above land surface.

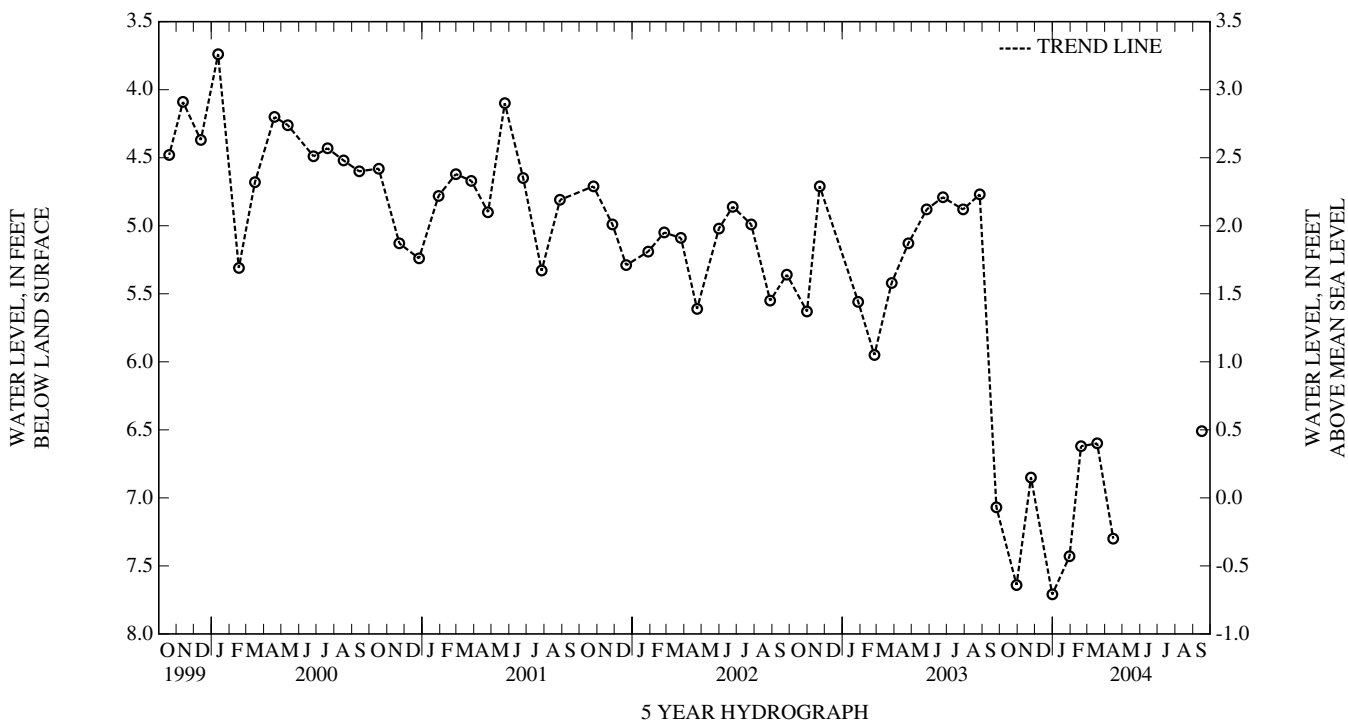
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--December 1977 to December 1978, March 1981, December 1985, October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.50 ft below land surface, April 13, 1978, May 5, 1978, and December 11, 1985; lowest measured, 7.71 ft below land surface, December 31, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	7.64	DEC 31, 2003	7.71	FEB 19, 2004	6.62	APR 15, 2004	7.30
NOV 24	6.85	JAN 30, 2004	7.43	MAR 18	6.60	SEP 16	6.51
HIGHEST 6.51 SEP 16, 2004							
LOWEST 7.71 DEC 31, 2003							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bc 185. SITE ID.--391650076050402. PERMIT NUMBER.--KE-88-0255.

LOCATION.--Lat 39°16'50", long 76°05'04", Hydrologic Unit 02060002, at Worton Regional Park, Worton. Owner: Maryland Geological Survey.

AQUIFER.--Pensauken Formation (Columbia aquifer) of Upper Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 55 ft; casing diameter 4 in., to 40 ft, and 50 to 55 ft; screen diameter 4 in., from 40 to 50 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 82.09 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.41 ft above land surface.

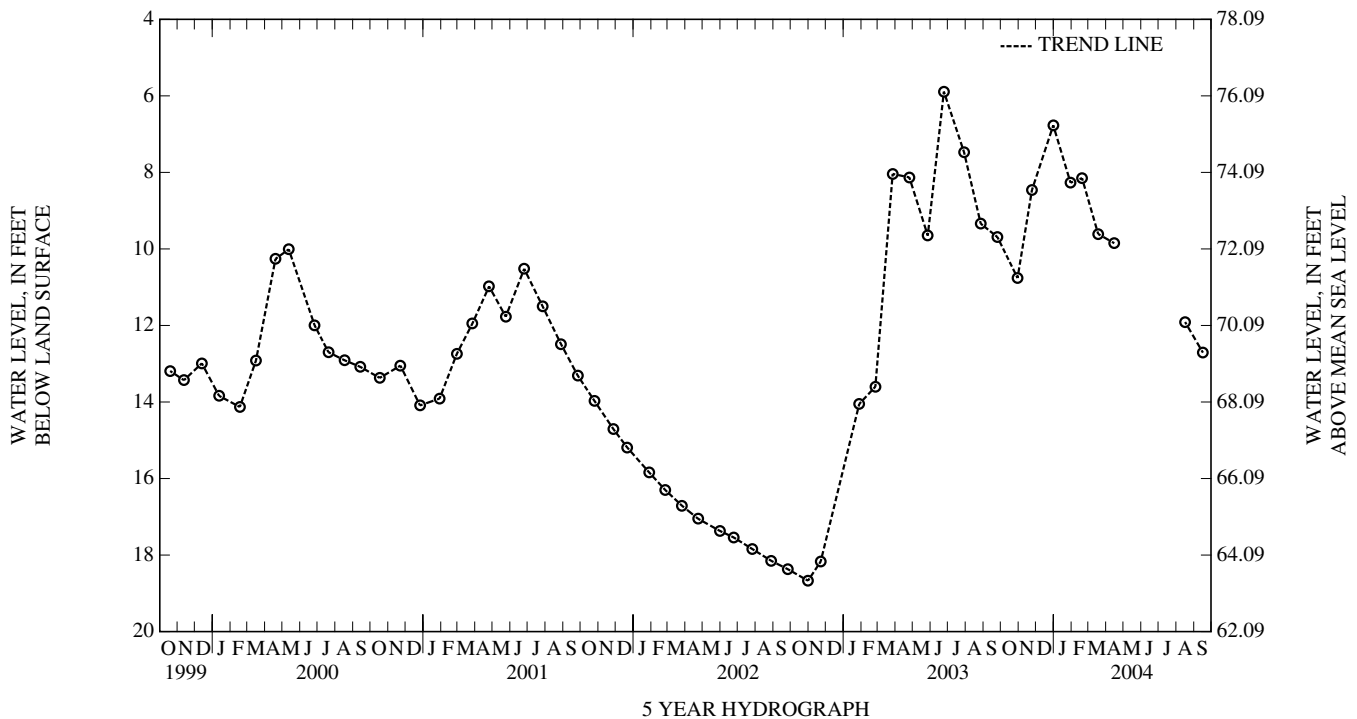
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.89 ft below land surface, June 24, 2003; lowest measured, 20.23 ft below land surface, December 12-14, 1992 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	10.76	JAN 30, 2004	8.27	APR 15, 2004	9.85
NOV 24	8.46	FEB 19	8.15	AUG 16	11.91
DEC 31	6.77	MAR 18	9.61	SEP 16	12.71
HIGHEST 6.77 DEC 31, 2003					
LOWEST 12.71 SEP 16, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bc 186. SITE ID.--391650076050403. PERMIT NUMBER.--KE-88-0286.

LOCATION.--Lat 39°16'50", long 76°05'04", Hydrologic Unit 02060002, at Worton Regional Park, Worton. Owner: Maryland Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 270 ft; casing diameter 4 in., to 255 ft, and 265 to 270 ft; screen diameter 4 in., from 255 to 265 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1993 to September 1999. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 82 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.76 ft above land surface.

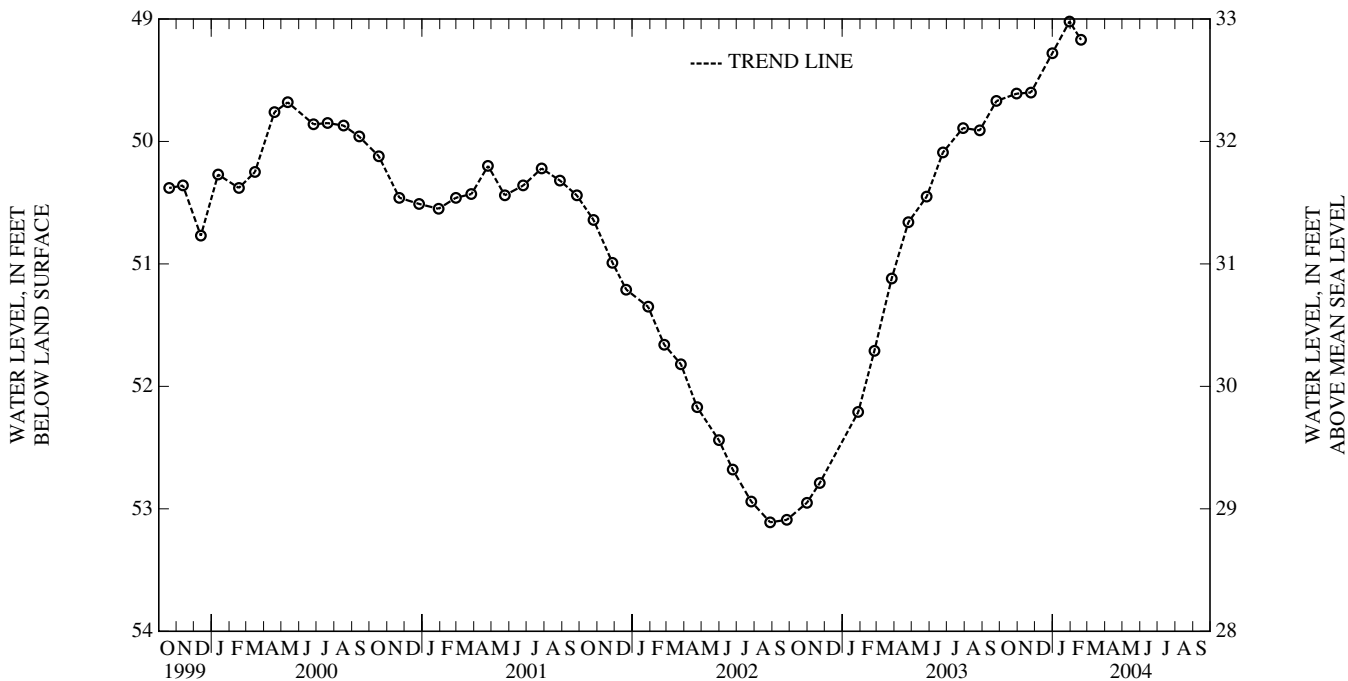
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--February 1992 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 47.27 below land surface, April 15, 1997; lowest measured, 53.11 ft below land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	49.61	DEC 31, 2003	49.28	FEB 19, 2004	49.17
NOV 24	49.60	JAN 30, 2004	49.02		
HIGHEST 49.02 JAN 30, 2004					
LOWEST 49.61 OCT 30, 2003					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 150. SITE ID.--391657076004001.

LOCATION.--Lat 39°16'57", long 76°00'39", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augured, observation, artesian well, depth 8.4 ft; casing diameter 1 in., to 7.9 ft; screen diameter 1 in., from 7.9 to 8.4 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 6.81 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.20 ft above land surface.

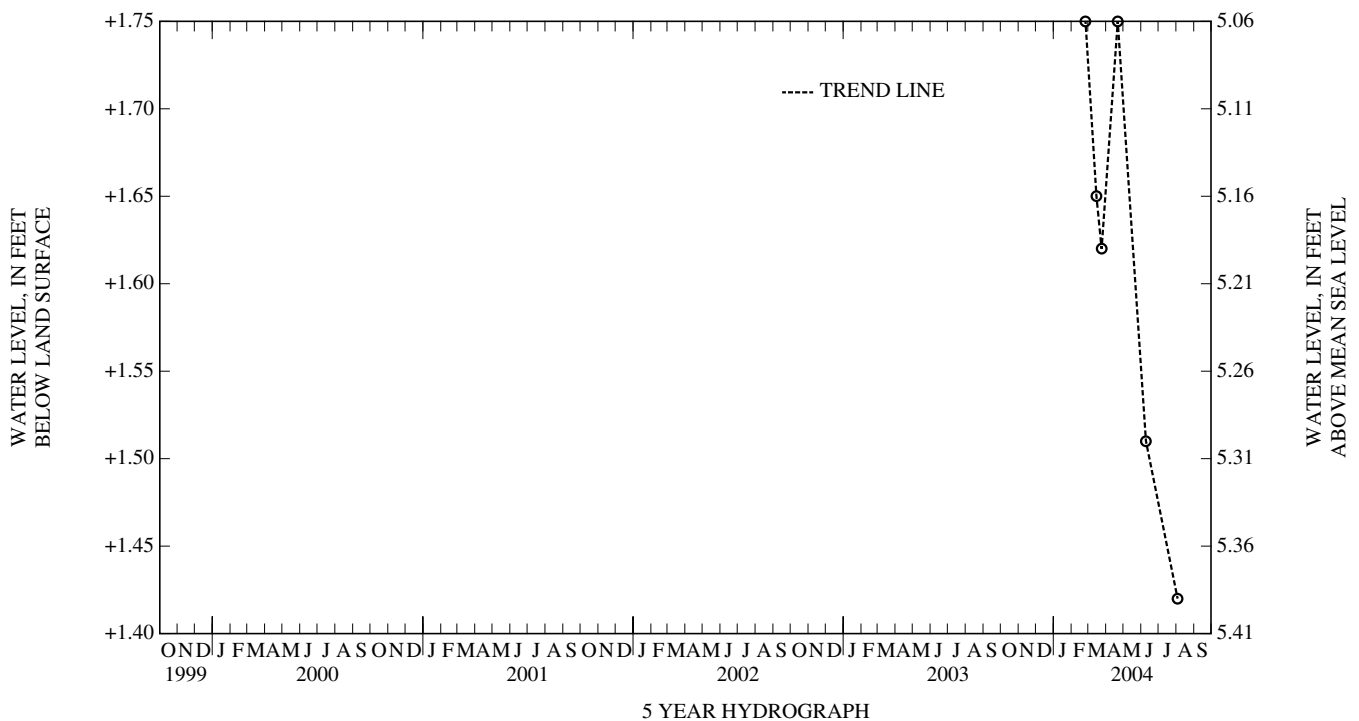
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-1A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.75 ft above land surface, February 25, 2004 and April 21, 2004; lowest measured, 1.42 ft above land surface, August 3, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	+1.75	MAR 24, 2004	+1.62	JUN 09, 2004	+1.51
MAR 15	+1.65	APR 21	+1.75	AUG 03	+1.42
HIGHEST	+1.75	FEB 25, 2004	APR 21, 2004		
LOWEST	+1.42	AUG 03, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 151. SITE ID.--391657076003901.

LOCATION.--Lat 39°16'57", long 76°00'39", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augured, observation, artesian well, depth 9.2 ft; casing diameter 1 in., to 8.7 ft; screen diameter 1 in., from 8.7 to 9.2 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.26 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.40 ft above land surface.

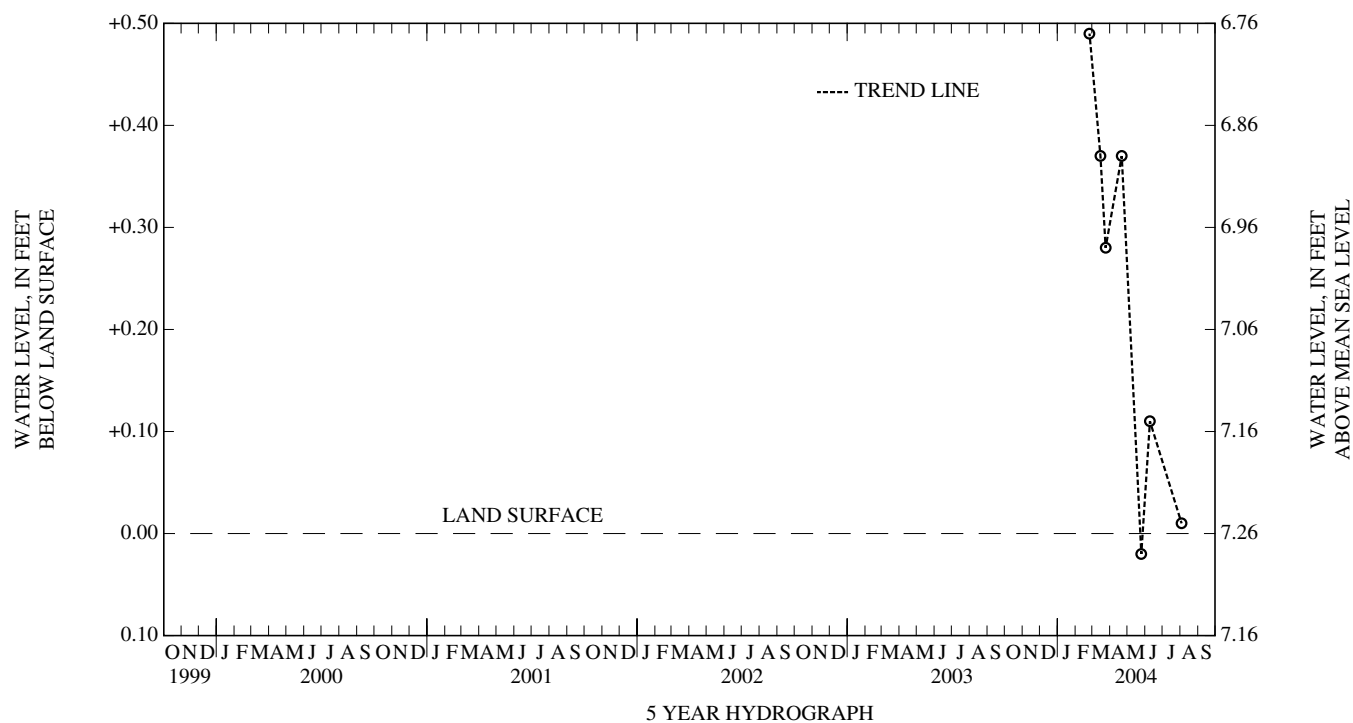
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-2A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.49 ft above land surface, February 25, 2004; lowest measured, 0.02 ft below land surface, May 25, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	+49	MAR 24, 2004	+28	MAY 25, 2004	.02	AUG 03, 2004	+01
MAR 15	+37	APR 21	+37	JUN 09	+11		
HIGHEST	+49	FEB 25, 2004					
LOWEST	.02	MAY 25, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 152. SITE ID.--391657076003801.

LOCATION.--Lat 39°16'57", long 76°00'38", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augured, observation, artesian well, depth 8.7 ft; casing diameter 1 in., to 8.2 ft; screen diameter 1 in., from 8.2 to 8.7 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.13 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.50 ft above land surface.

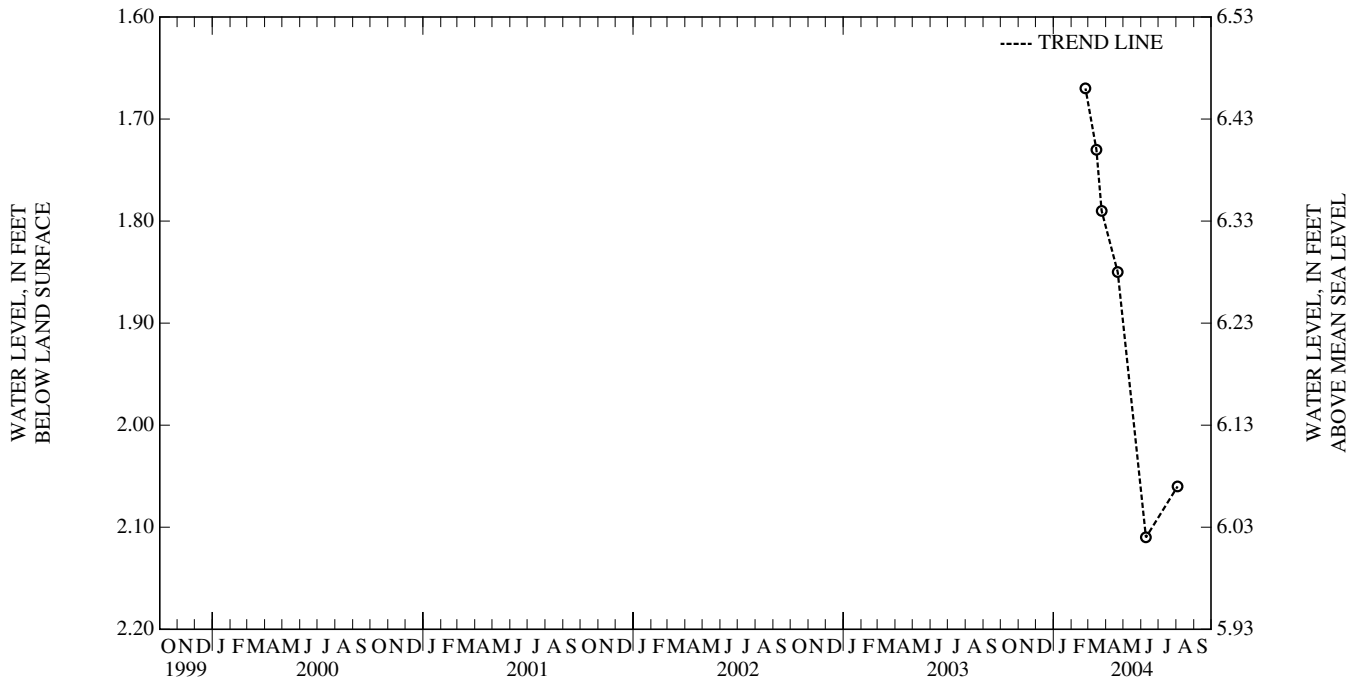
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-3A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.67 ft below land surface, February 25, 2004; lowest measured, 2.11 ft below land surface, June 9, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	1.67	MAR 24, 2004	1.79	JUN 09, 2004	2.11
MAR 15	1.73	APR 21	1.85	AUG 03	2.06
HIGHEST 1.67 FEB 25, 2004					
LOWEST 2.11 JUN 09, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 153. SITE ID.--391657076003701.

LOCATION.--Lat 39°16'57", long 76°00'37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.5 ft; casing diameter 1 in., to 8.0 ft; screen diameter 1 in., from 8.0 to 8.5 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.92 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.02 ft above land surface.

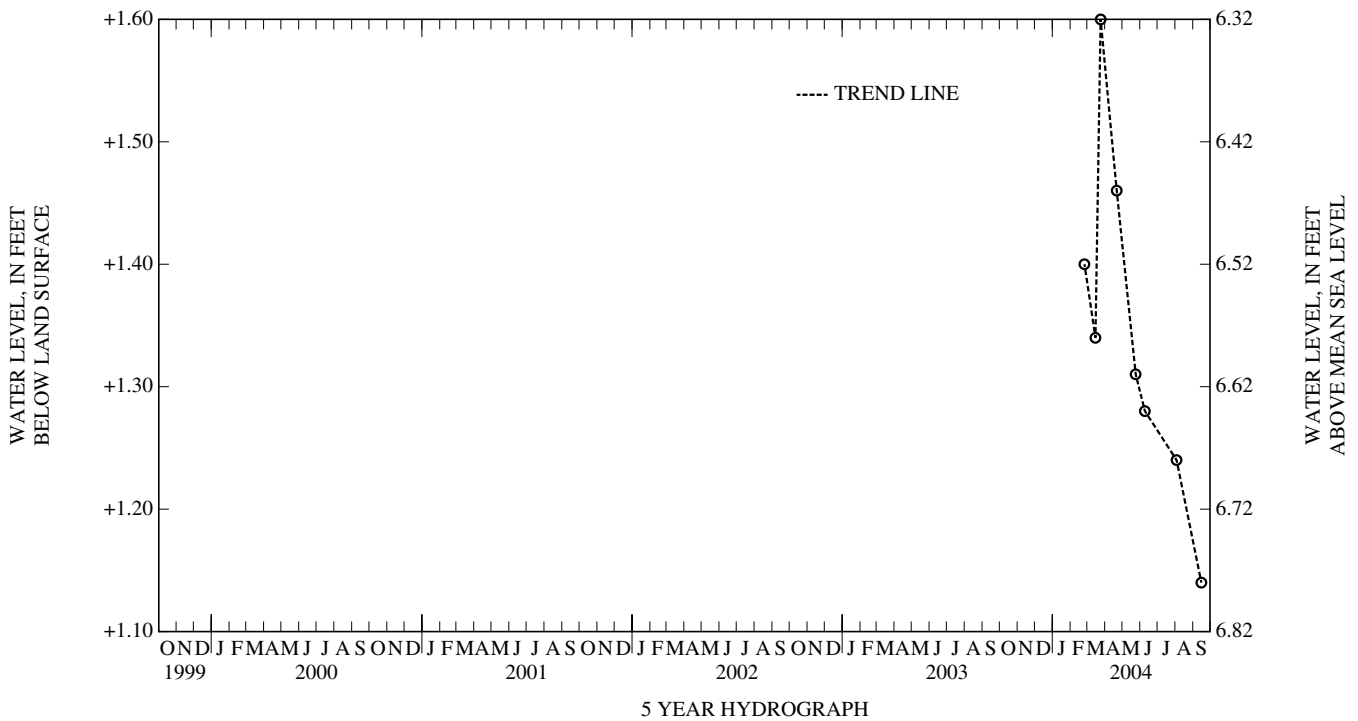
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-4A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.60 ft above land surface, March 24, 2004; lowest measured, 1.14 ft above land surface, September 15, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	+1.40	MAR 24, 2004	+1.60	MAY 24, 2004	+1.31	AUG 03, 2004	+1.24
MAR 15	+1.34	APR 21	+1.46	JUN 09	+1.28	SEP 15	+1.14
HIGHEST +1.60 MAR 24, 2004							
LOWEST +1.14 SEP 15, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 154. SITE ID.--391657076003601.

LOCATION.--Lat 39°16'57", long 76°00'37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, water-table well, depth 1.8 ft; casing diameter 2 in., to 1.2 ft; screen diameter 2 in., from 1.2 to 1.8 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.03 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.00 ft above land surface.

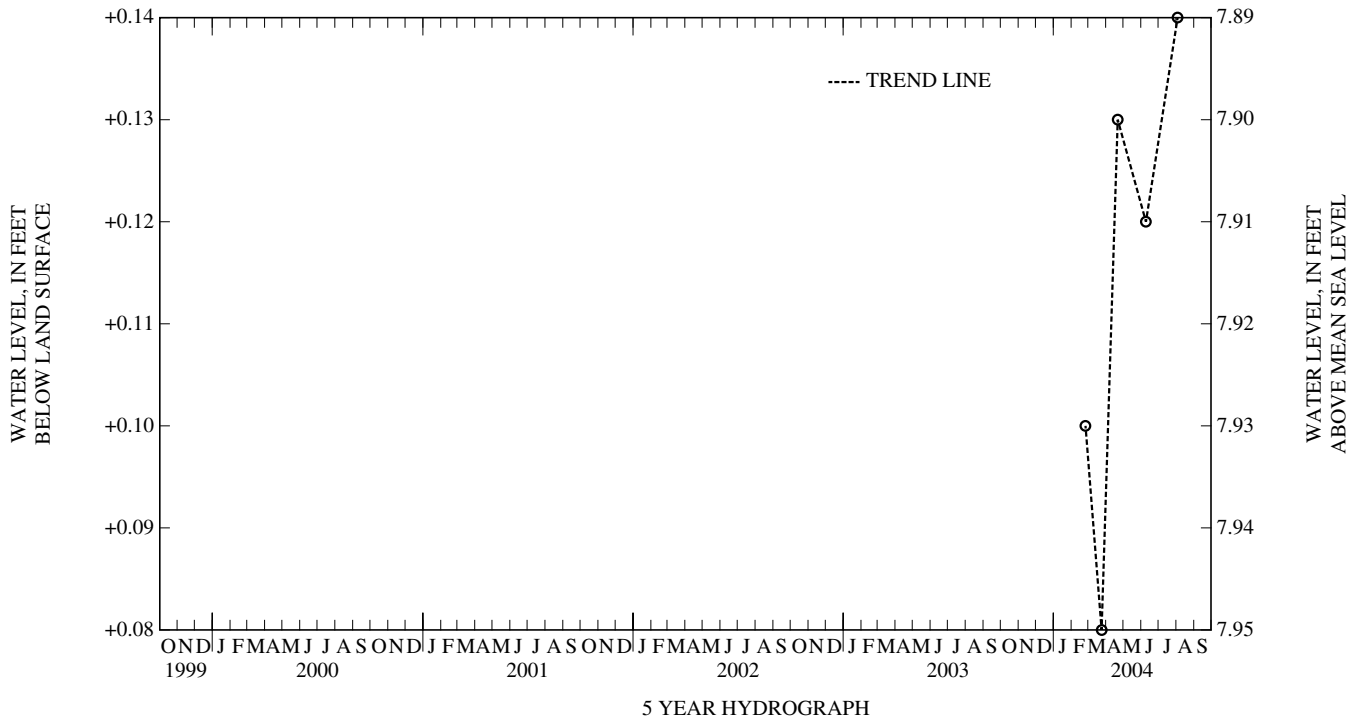
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-5A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.18 ft above land surface, October 4, 2004; lowest measured, 0.08 ft above land surface, March 24, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	+0.10	APR 21, 2004	+0.13	AUG 03, 2004	+0.14
MAR 24	+0.08	JUN 09	+0.12		
HIGHEST	+0.14	AUG 03, 2004			
LOWEST	+0.08	MAR 24, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 155. SITE ID.--391702076003901.

LOCATION.--Lat 39°17'02", long 76°00'38", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.9 ft; casing diameter 1 in., to 8.4 ft; screen diameter 1 in., from 8.4 to 8.9 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.47 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.50 ft above land surface.

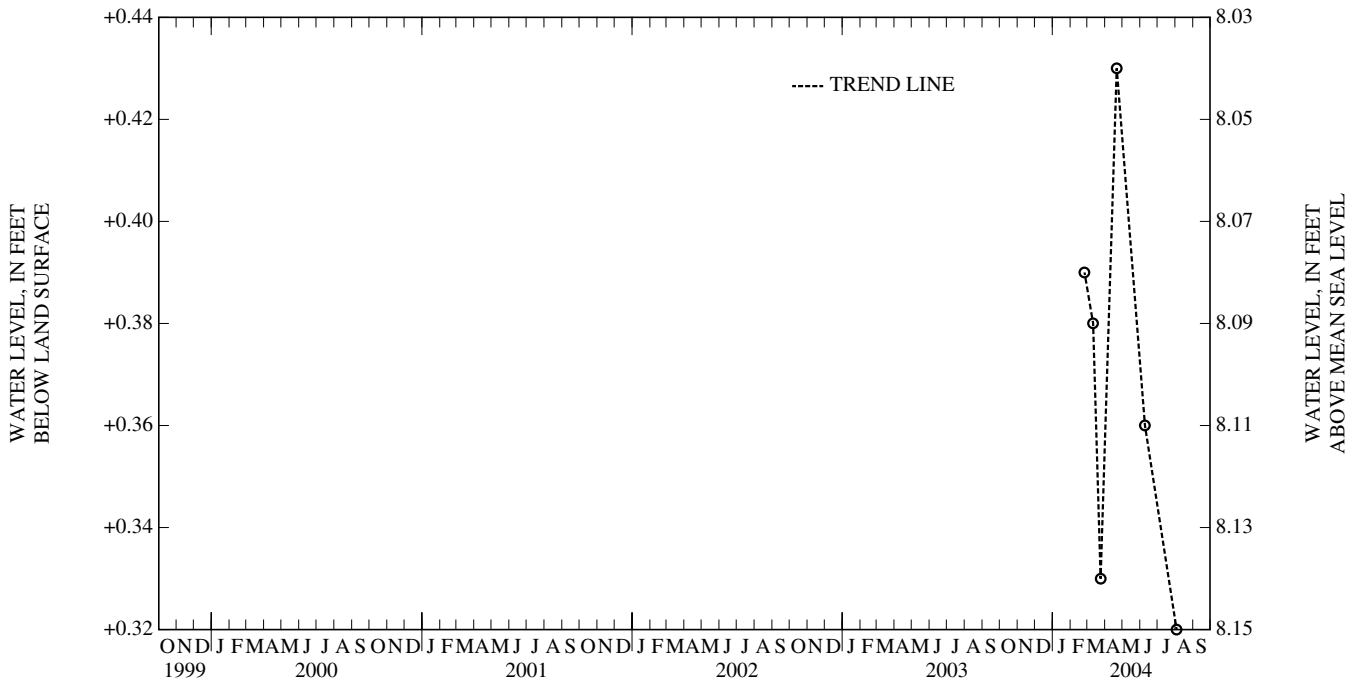
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-1A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.43 ft above land surface, October 4, 2004 and April 21, 2004; lowest measured, 0.32 ft above land surface, August 3, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	+0.39	MAR 24, 2004	+0.33	JUN 09, 2004	+0.36
MAR 11	+0.38	APR 21	+0.43	AUG 03	+0.32
HIGHEST	+0.43	APR 21, 2004			
LOWEST	+0.32	AUG 03, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 156. SITE ID.--391702076003801.

LOCATION.--Lat 39°17'02", long 76°00'37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.9 ft; casing diameter 1 in., to 8.4 ft; screen diameter 1 in., from 8.4 to 8.9 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.44 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.50 ft above land surface.

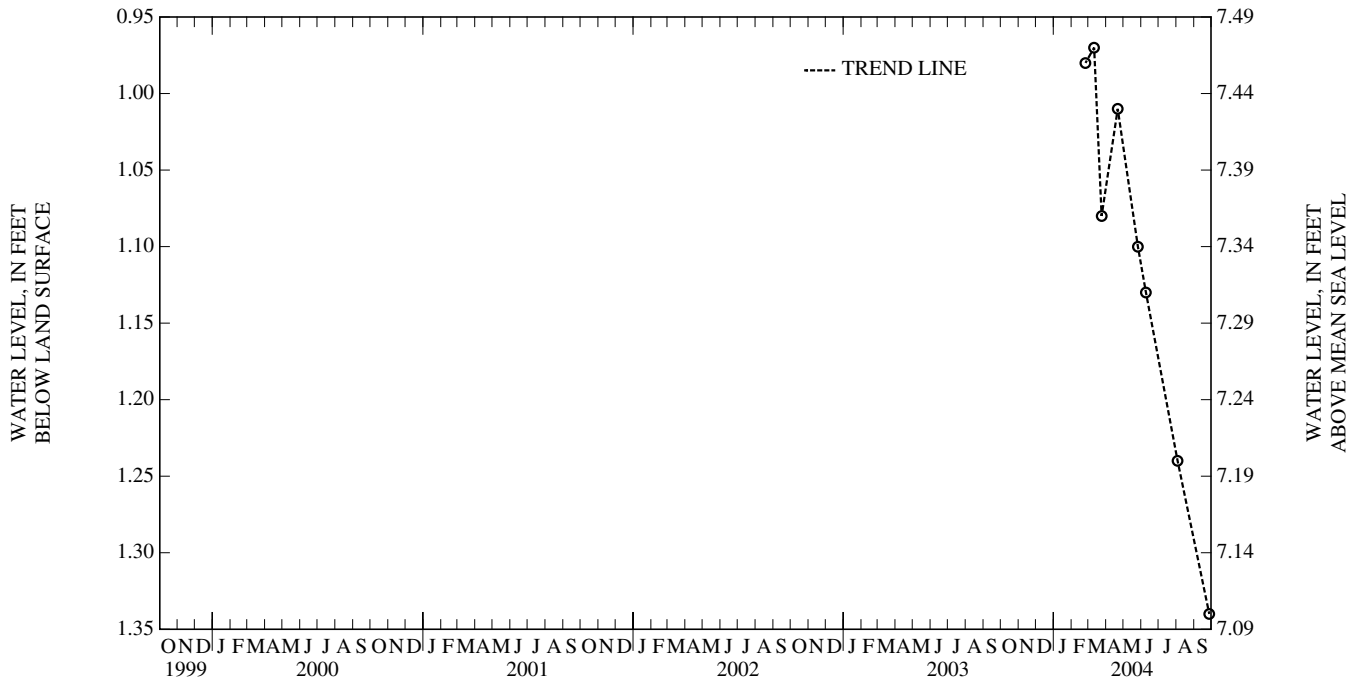
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-2A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land surface, March 11, 2004; lowest measured, 1.34 ft above land surface, September 27, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	.98	MAR 24, 2004	1.08	MAY 26, 2004	1.10	AUG 03, 2004	1.24
MAR 11	.97	APR 21	1.01	JUN 09	1.13	SEP 27	1.34
HIGHEST	.97	MAR 11, 2004					
LOWEST	1.34	SEP 27, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 157. SITE ID.--391702076003701.

LOCATION.--Lat 39°17'02", long 76°00'37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.4 ft; casing diameter 1 in., to 7.9 ft; screen diameter 1 in., from 7.9 to 8.4 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.05 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.90 ft above land surface.

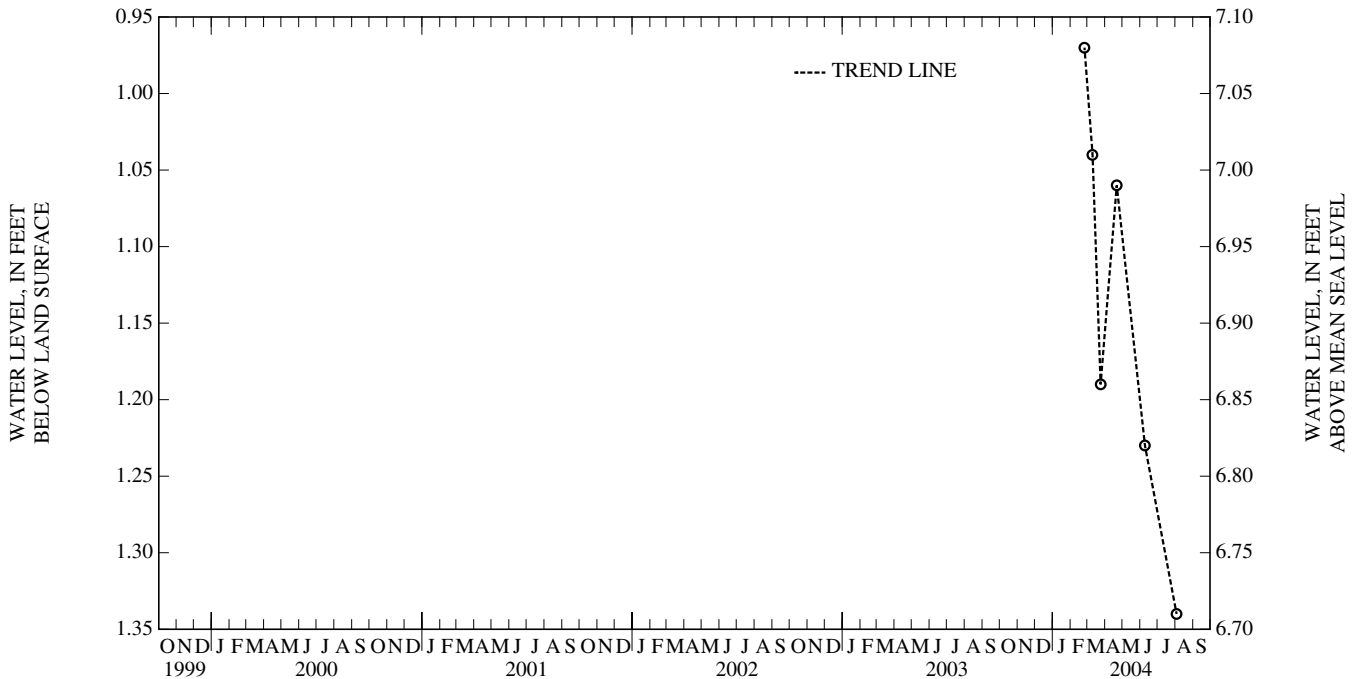
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-3A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land surface, February 25, 2004; lowest measured, 1.34 ft below land surface, August 3, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	.97	MAR 24, 2004	1.19	JUN 09, 2004	1.23
MAR 10	1.04	APR 21	1.06	AUG 03	1.34
HIGHEST .97 FEB 25, 2004					
LOWEST 1.34 AUG 03, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 158. SITE ID.--391701076003701.

LOCATION.--Lat 39°17'01", long 76°00'36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 4.2 ft; casing diameter 1 in., to 3.7 ft; screen diameter 1 in., from 3.7 to 4.2 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.65 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.20 ft above land surface.

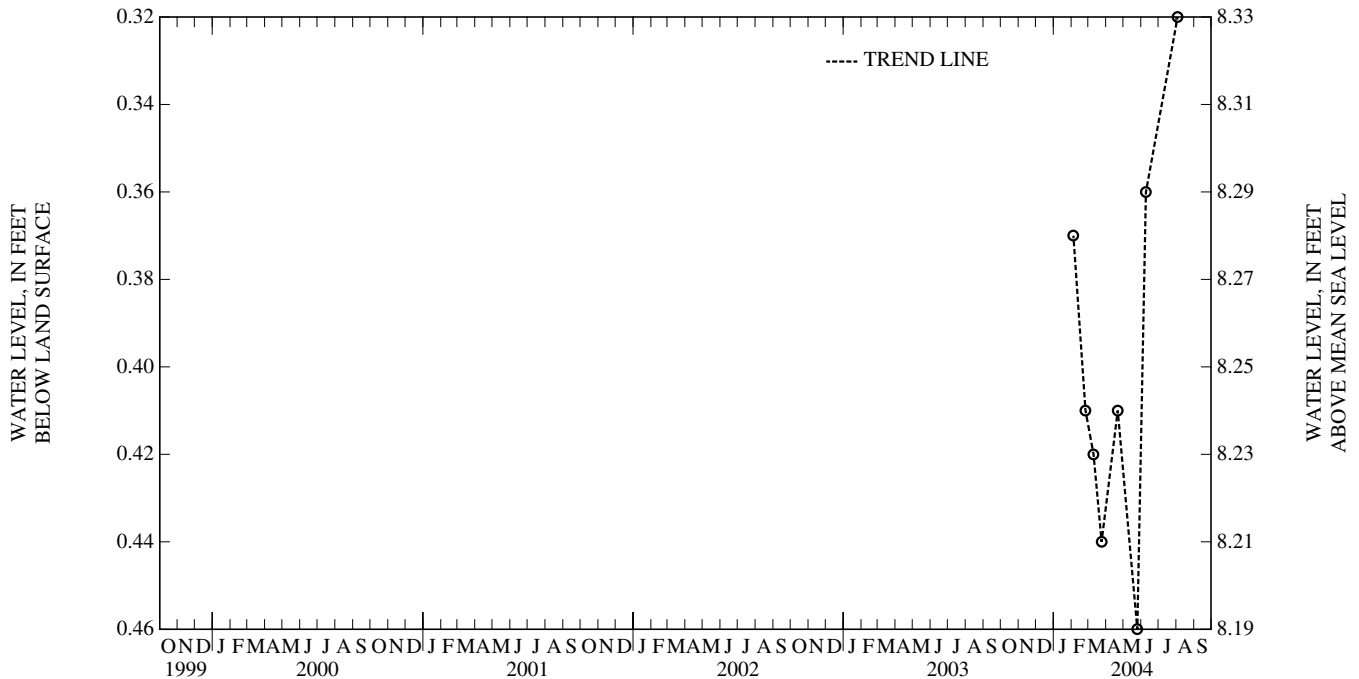
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-4A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.32 ft below land surface, August 3, 2004; lowest measured, 0.46 ft below land surface, May 25, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04, 2004	.37	MAR 10, 2004	.42	APR 21, 2004	.41	JUN 09, 2004	.36
25	.41	24	.44	MAY 25	.46	AUG 03	.32
HIGHEST	.32	AUG 03, 2004					
LOWEST	.46	MAY 25, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 159. SITE ID.--391701076003601.

LOCATION.--Lat 39°17'01", long 76°00'36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, water-table well, depth 1.8 ft; casing diameter 2 in., to 1.2 ft; screen diameter 2 in., from 1.2 to 1.8 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.63 ft, surveyed, above North American Vertical Datum of 1988. Measuring point: Top of casing, 1.00 ft above land surface.

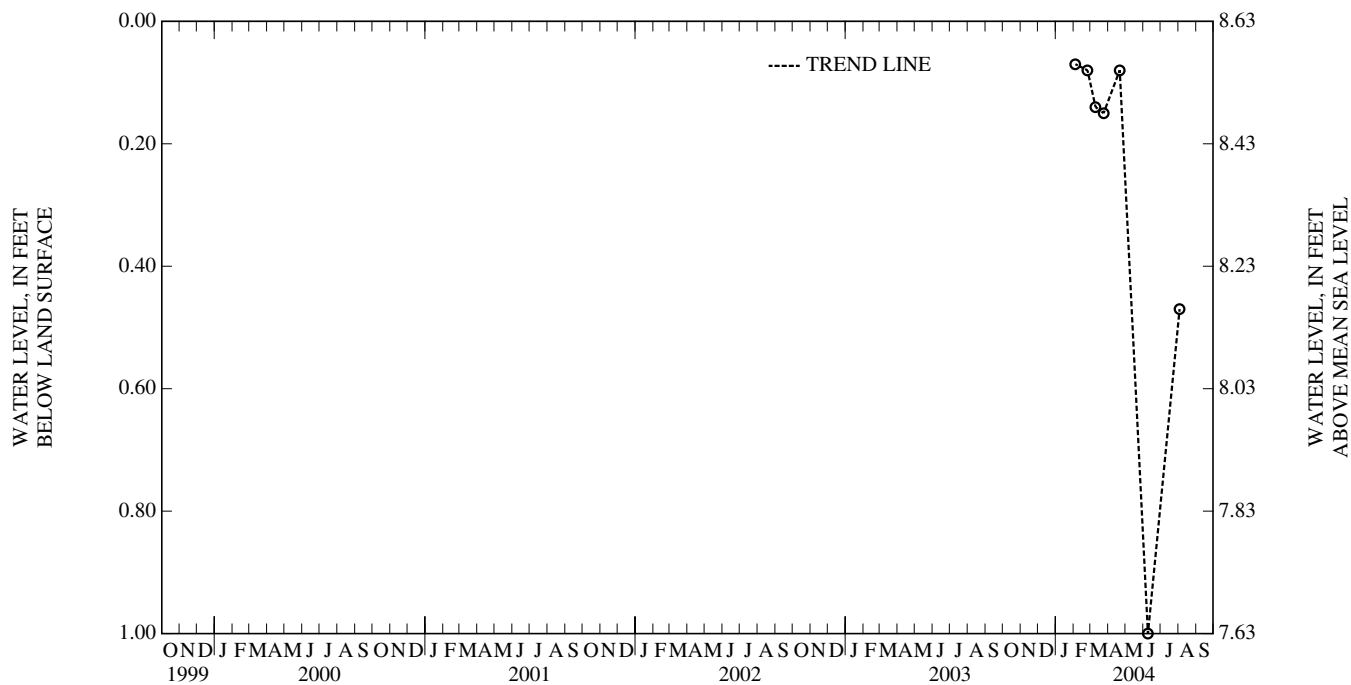
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-5A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.07 ft below land surface, February 4, 2004; lowest measured, 1.00 ft below land surface, June 9, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04, 2004	.07	MAR 10, 2004	.14	APR 21, 2004	.08	AUG 03, 2004	.47
	.08		.15	JUN 09	1.00		
HIGHEST	.07	FEB 04, 2004					
LOWEST	1.00	JUN 09, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 160. SITE ID.--391701076003602.

LOCATION.--Lat 39°17'01", long 76°00'36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 4.3 ft; casing diameter 2 in., to 3.8 ft; screen diameter 2 in., from 3.8 to 4.3 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.64 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.20 ft above land surface.

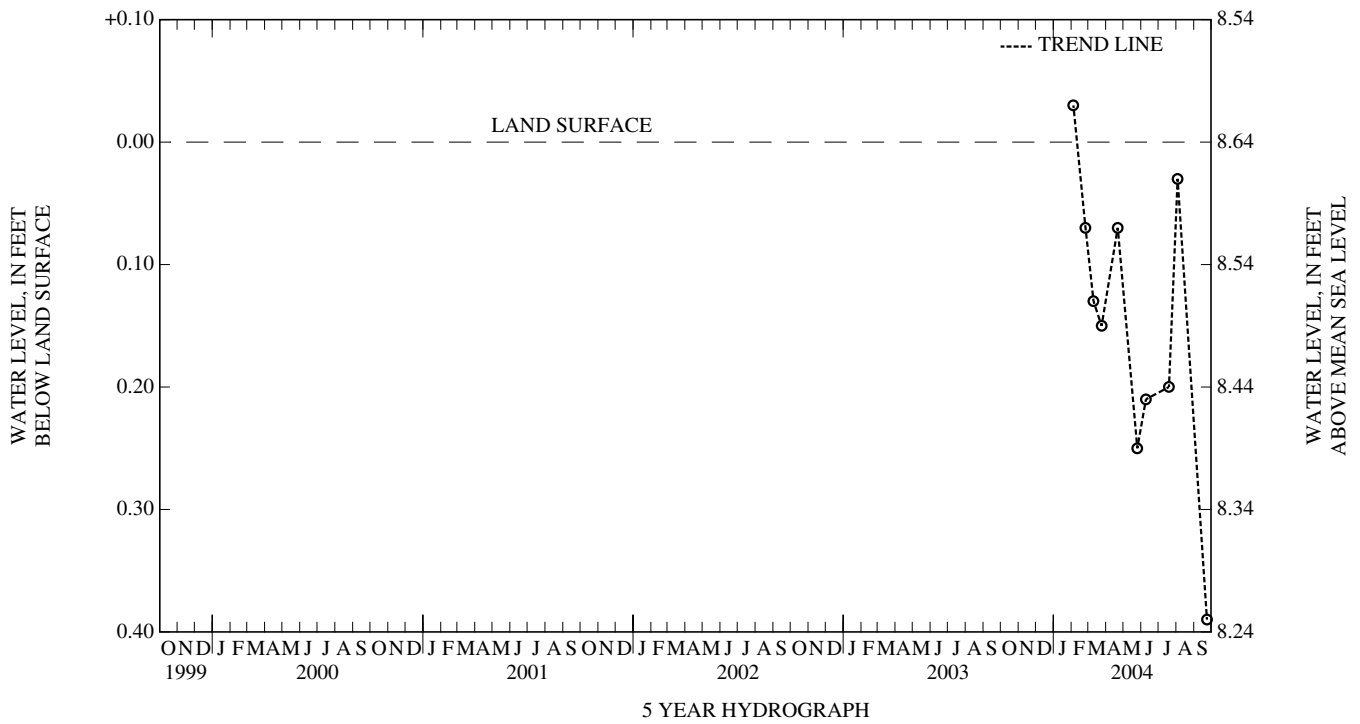
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-5B.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft below land surface, February 4, 2004; lowest measured, 0.39 ft below land surface, September 23, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04, 2004	+03	MAR 24, 2004	.15	JUN 09, 2004	.21	SEP 23, 2004	.39
25	.07	APR 21	.07	JUL 19	.20		
MAR 10	.13	MAY 25	.25	AUG 03	.03		
HIGHEST	+03	FEB 04, 2004					
LOWEST	.39	SEP 23, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 161. SITE ID.--391703076003701.

LOCATION.--Lat 39°17'03", long 76°00'36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 9.7 ft; casing diameter 1 in., to 9.2 ft; screen diameter 1 in., from 9.2 to 9.7 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 9.82 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.90 ft above land surface.

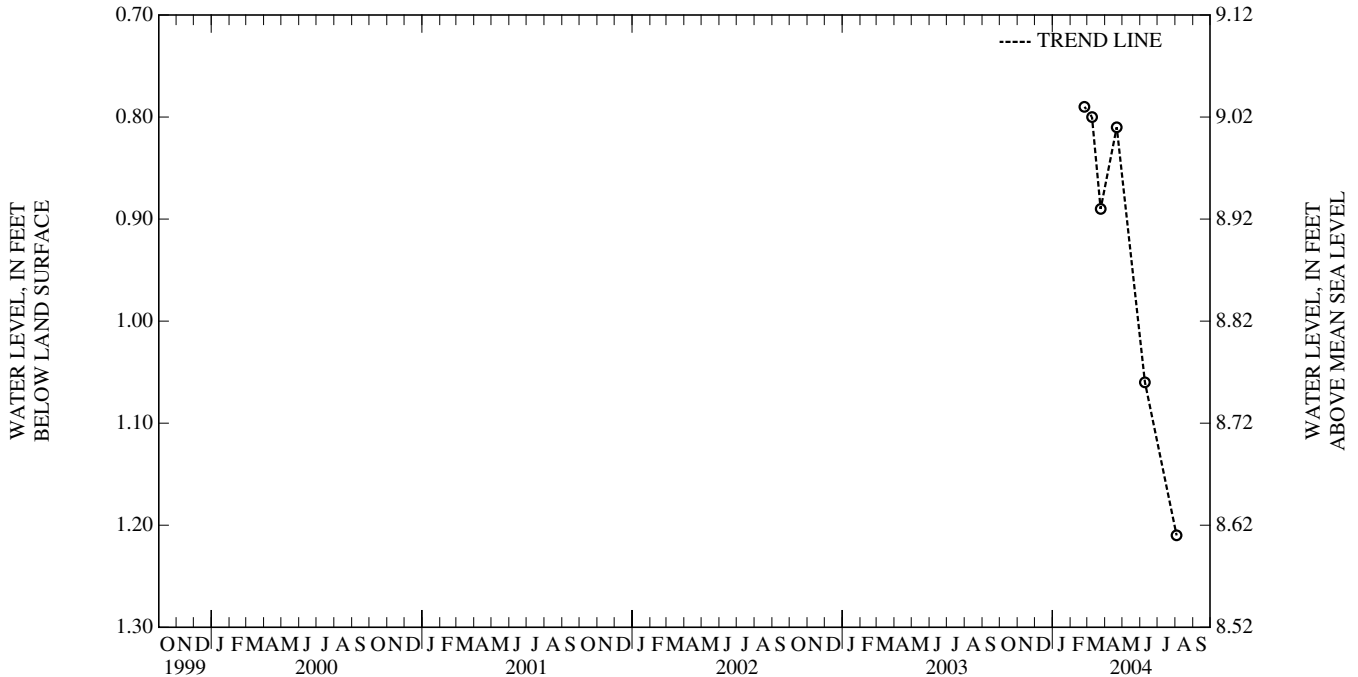
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-1A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.79 ft below land surface, February 25, 2004; lowest measured, 1.21 ft below land surface, August 3, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	.79	MAR 24, 2004	.89	JUN 09, 2004	1.06
MAR 09	.80	APR 21	.81	AUG 03	1.21
HIGHEST .79 FEB 25, 2004					
LOWEST 1.21 AUG 03, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 162. SITE ID.--391703076003601.

LOCATION.--Lat 39°17'03", long 76°00'36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.7 ft; casing diameter 1 in., to 8.2 ft; screen diameter 1 in., from 8.2 to 8.7 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.57 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.80 ft above land surface.

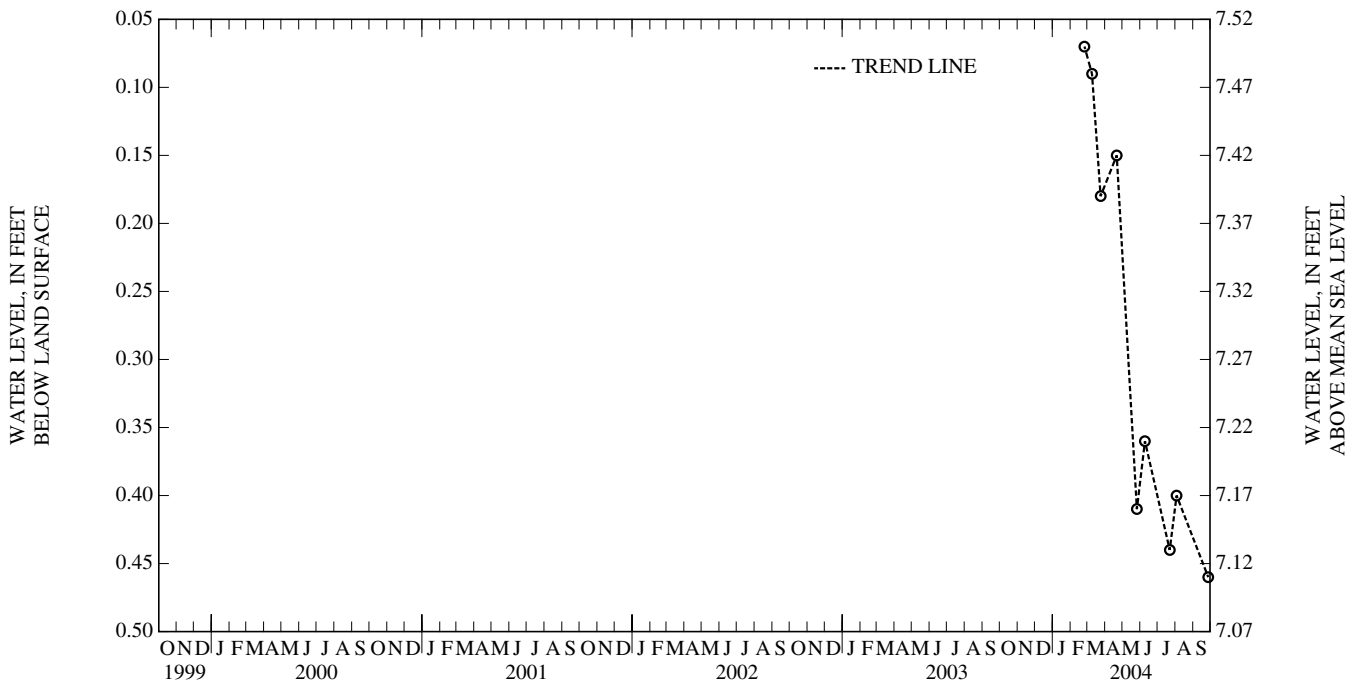
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-2A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.07 ft below land surface, February 25, 2004; lowest measured, 0.46 ft below land surface, September 27, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	.07	APR 21, 2004	.15	JUL 22, 2004	.44
MAR 09	.09	MAY 26	.41	AUG 03	.40
24	.18	JUN 09	.36	SEP 27	.46
HIGHEST	.07	FEB 25, 2004			
LOWEST	.46	SEP 27, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 163. SITE ID.--391703076003501.

LOCATION.--Lat 39°17'03", long 76°00'35", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 9.7 ft; casing diameter 1 in., to 9.2 ft; screen diameter 1 in., from 9.2 to 9.7 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.80 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.00 ft above land surface.

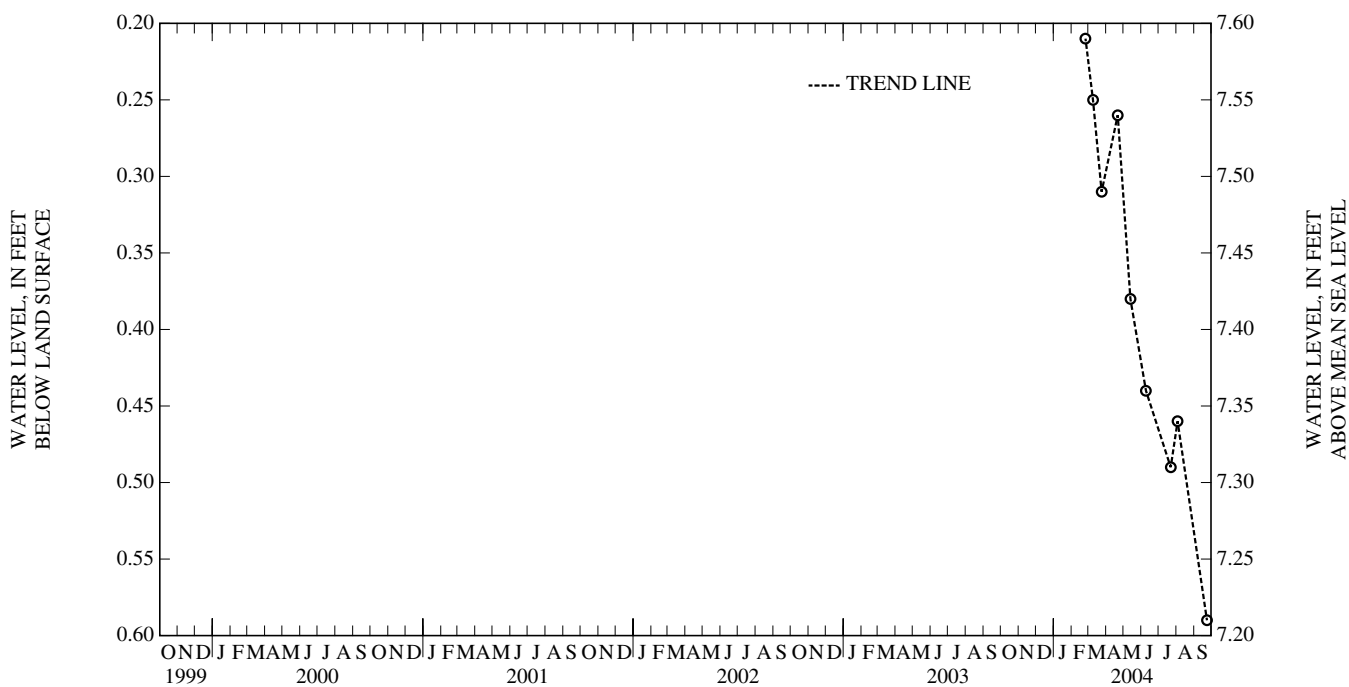
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-3A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.21 ft below land surface, February 25, 2004; lowest measured, 0.59 ft below land surface, September 23, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	.21	APR 21, 2004	.26	JUL 22, 2004	.49
MAR 09	.25	MAY 13	.38	AUG 03	.46
24	.31	JUN 09	.44	SEP 23	.59
HIGHEST	.21	FEB 25, 2004			
LOWEST	.59	SEP 23, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 164. SITE ID.--391703076003401.

LOCATION.--Lat 39°17'02", long 76°00'35", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 7.9 ft; casing diameter 1 in., to 7.4 ft; screen diameter 1 in., from 7.4 to 7.9 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.90 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.50 ft above land surface.

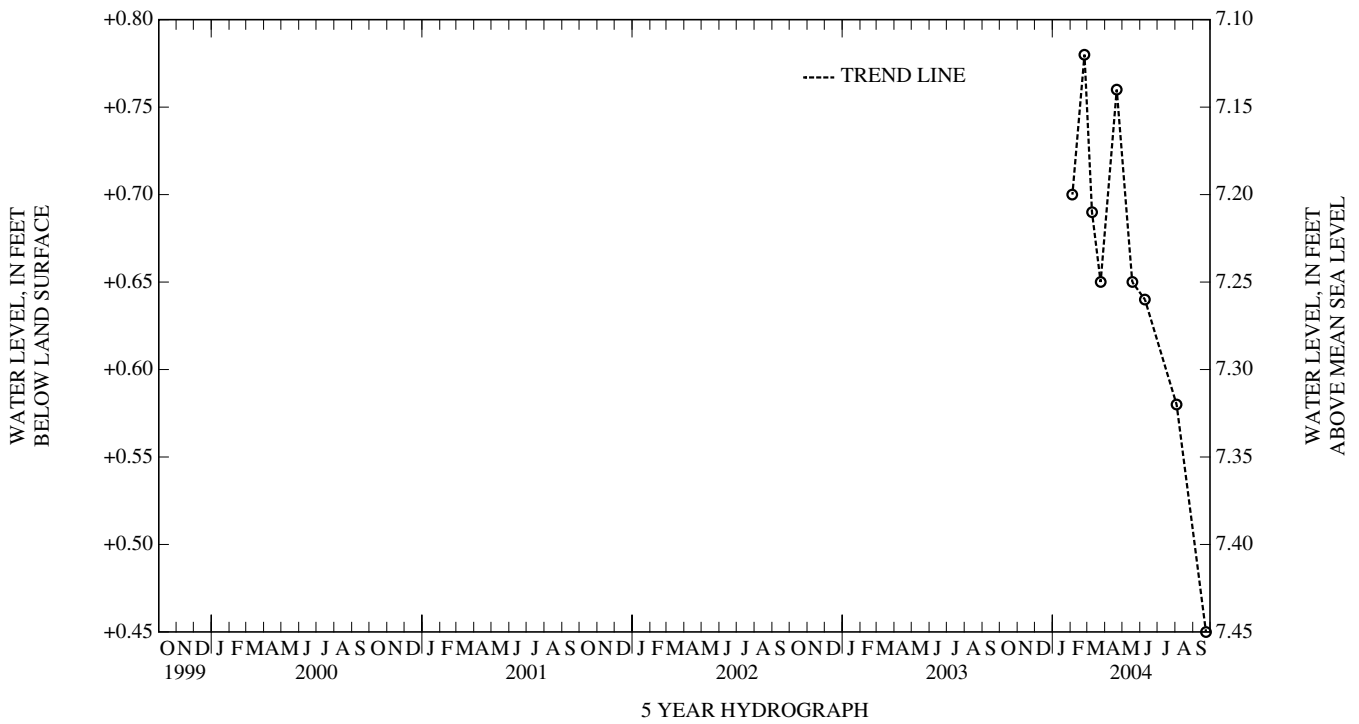
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-4A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.78 ft above land surface, February 25, 2004; lowest measured, 0.45 ft above land surface, September 23, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04, 2004	+0.70	MAR 24, 2004	+0.65	JUN 09, 2004	+0.64
25	+0.78	APR 21	+0.76	AUG 03	+0.58
MAR 09	+0.69	MAY 18	+0.65	SEP 23	+0.45
HIGHEST	+0.78	FEB 25, 2004			
LOWEST	+0.45	SEP 23, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 165. SITE ID.--391702076003401.

LOCATION.--Lat 39°17'02", long 76°00'34", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, water-table well, depth 1.8 ft; casing diameter 2 in., to 1.2 ft; screen diameter 2 in., from 1.2 to 1.8 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.38 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.00 ft above land surface.

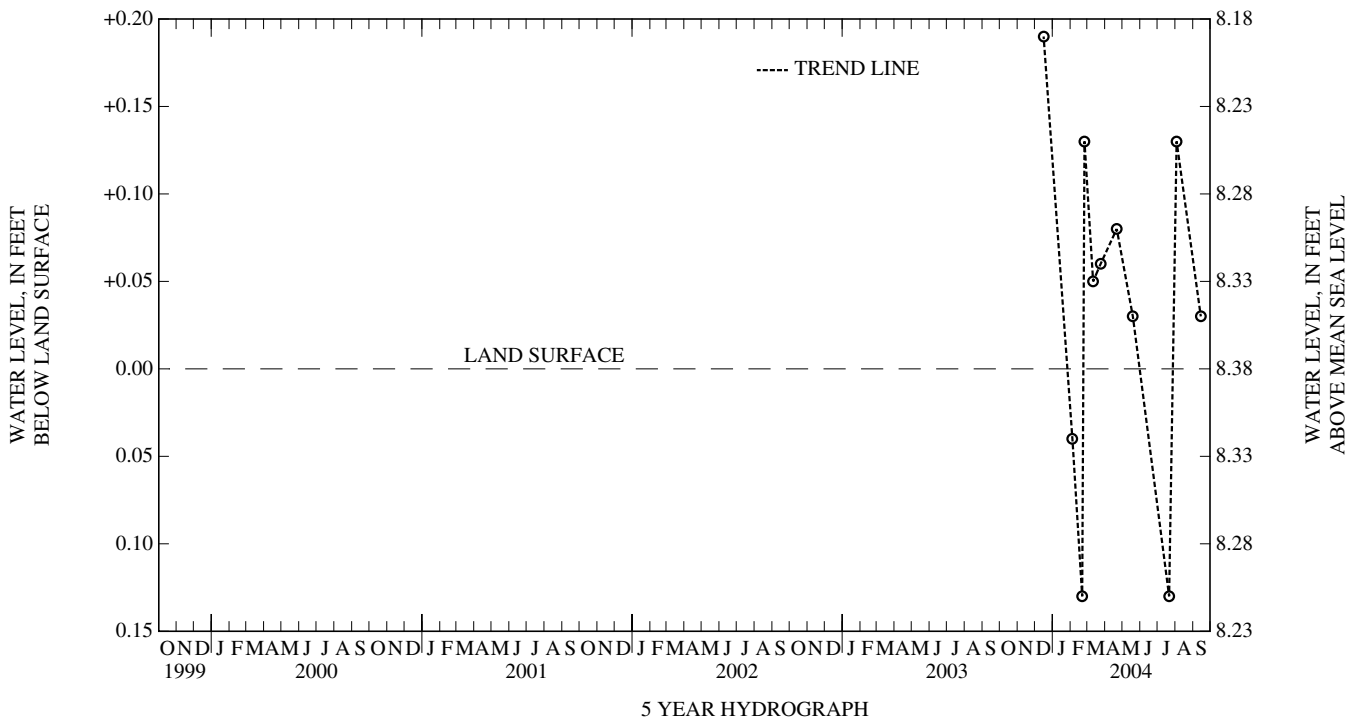
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-5A.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.42 ft above land surface, October 4, 2004; lowest measured, 0.13 ft below land surface, July 21, 2004 and February 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	+0.19	FEB 25, 2004	+0.13	APR 21, 2004	+0.08	AUG 03, 2004	+0.13
FEB 04, 2004	.04	MAR 11	+0.05	MAY 19	+0.03	SEP 14	+0.03
21	.13	24	+0.06	JUL 21	.13		
HIGHEST +0.19 DEC 16, 2003							
LOWEST .13 FEB 21, 2004 JUL 21, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 166. SITE ID.--391702076003402.

LOCATION.--Lat 39°17'02", long 76°00'34", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 5.6 ft; casing diameter 2 in., to 5.1 ft; screened from 5.1 to 5.6 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.37 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.00 ft above land surface.

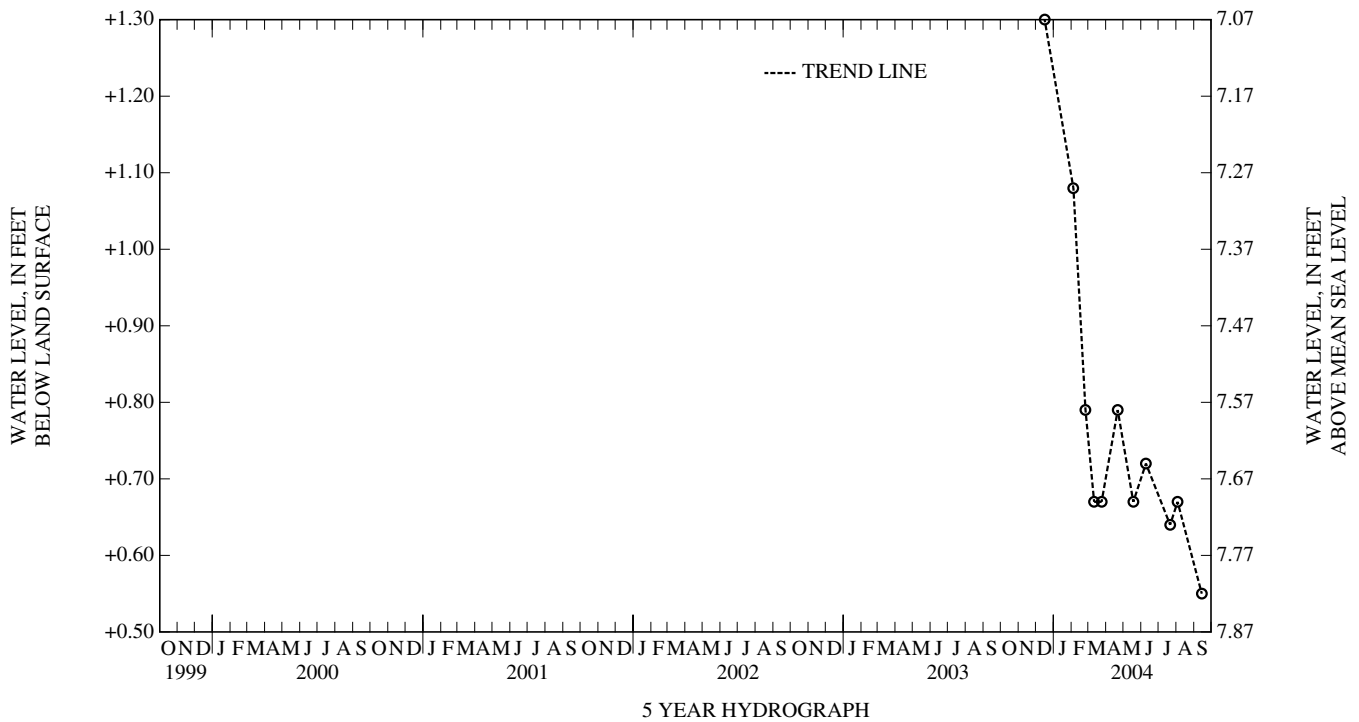
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-5B.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.30 ft above land surface, December 16, 2003; lowest measured, 0.55 ft above land surface, September 14, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	+1.30	MAR 11, 2004	+0.67	MAY 18, 2004	+0.67	AUG 03, 2004	+0.67
FEB 04, 2004	+1.08	24	+0.67	JUN 09	+0.72	SEP 14	+0.55
25	+0.79	APR 21	+0.79	JUL 21	+0.64		
HIGHEST +1.30 DEC 16, 2003							
LOWEST +0.55 SEP 14, 2004							



KENT COUNTY—Continued

WELL NUMBER.--KE Bd 167. SITE ID.--391702076003403.

LOCATION.--Lat 39°17'02", long 76°00'34", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.2 ft; casing diameter 2 in., to 7.7 ft; screened diameter 2 in., from 7.7 to 8.2 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.31 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.20 ft above land surface.

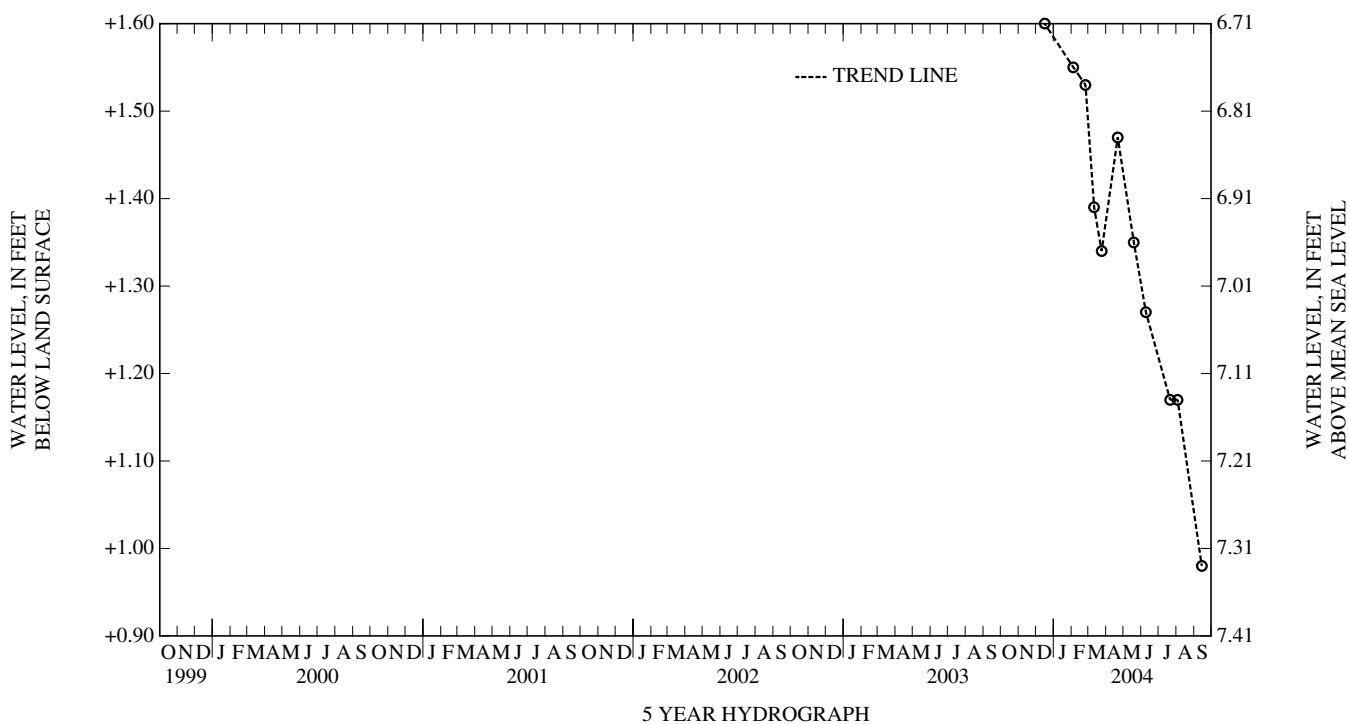
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-5C.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.60 ft above land surface, December 16, 2003; lowest measured, 0.98 ft above land surface, September 14, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	+1.60	MAR 11, 2004	+1.39	MAY 19, 2004	+1.35	AUG 03, 2004	+1.17
FEB 04, 2004	+1.55	24	+1.34	JUN 09	+1.27	SEP 14	+0.98
25	+1.53	APR 21	+1.47	JUL 21	+1.17		
HIGHEST +1.60 DEC 16, 2003							
LOWEST +0.98 SEP 14, 2004							



KENT COUNTY—Continued

WELL NUMBER.--KE Bd 168. SITE ID.--391702076003404.

LOCATION.--Lat 39°17'02", long 76°00'34", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 10.6 ft; casing diameter 2 in., to 10.1 ft; screen diameter 2 in., from 10.1 to 10.6 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.47 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.50 ft above land surface.

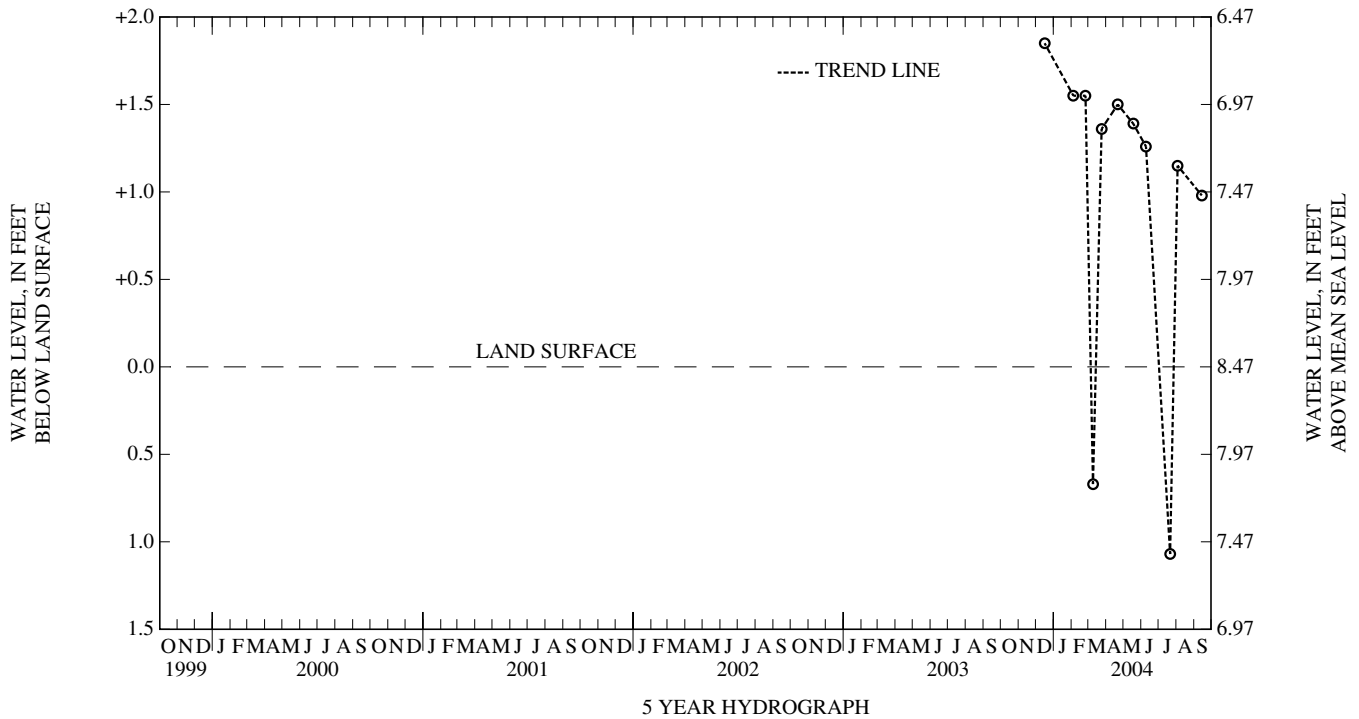
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-5D.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.85 ft above land surface, December 16, 2003; lowest measured, 1.07 ft below land surface, July 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	+1.85	MAR 09, 2004	.67	MAY 18, 2004	+1.39	AUG 03, 2004	+1.15
FEB 04, 2004	+1.55	24	+1.36	JUN 09	+1.26	SEP 14	+0.98
25	+1.55	APR 21	+1.50	JUL 21	1.07		
HIGHEST +1.85 DEC 16, 2003							
LOWEST 1.07 JUL 21, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY--Continued

WELL NUMBER.--KE Bd 169. SITE ID.--391704076003401.

LOCATION.--Lat 39°17'03", long 76°00'33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, water-table well, depth 1.8 ft; casing diameter 2 in., to 1.2 ft; screen diameter 2 in., from 1.2 to 1.8 ft.

INSTRUMENTATION.--Bi-monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.94 ft, surveyed, above North American Vertical Datum of 1988. Measuring point: Top of casing, 1.00 ft above land surface.

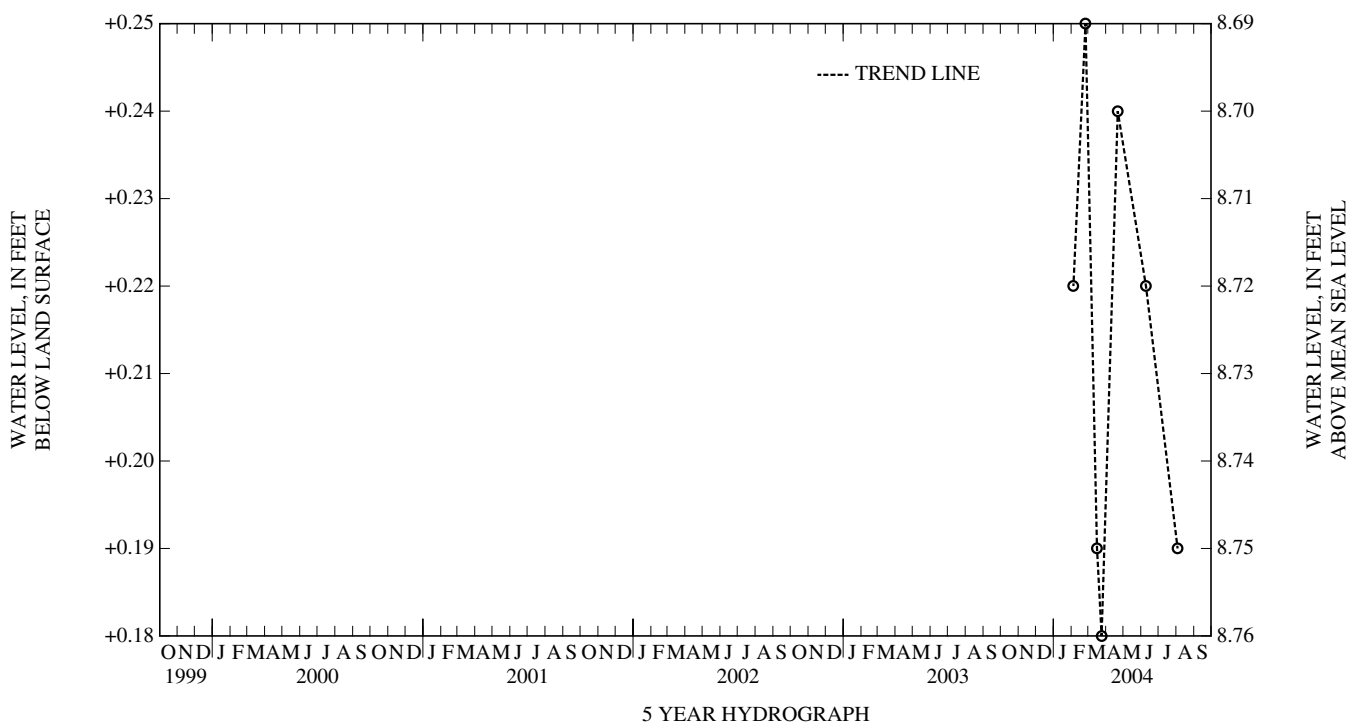
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-4-1A.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft above land surface, February 25, 2004; lowest measured, 0.17 ft above land surface, December 15, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04, 2004	+0.22	MAR 16, 2004	+0.19	APR 21, 2004	+0.24	AUG 03, 2004	+0.19
	+0.25		+0.18	JUN 09	+0.22		
	HIGHEST +0.25	FEB 25, 2004					
	LOWEST +0.18	MAR 24, 2004					



KENT COUNTY—Continued

WELL NUMBER.--KE Bd 170. SITE ID.--391704076003402.

LOCATION.--Lat 39°17'03", long 76°00'33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 6.2 ft; casing diameter 2 in., to 5.7 ft; screen diameter 2in., from 5.7 to 6.2 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 9.01 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.70 ft above land surface.

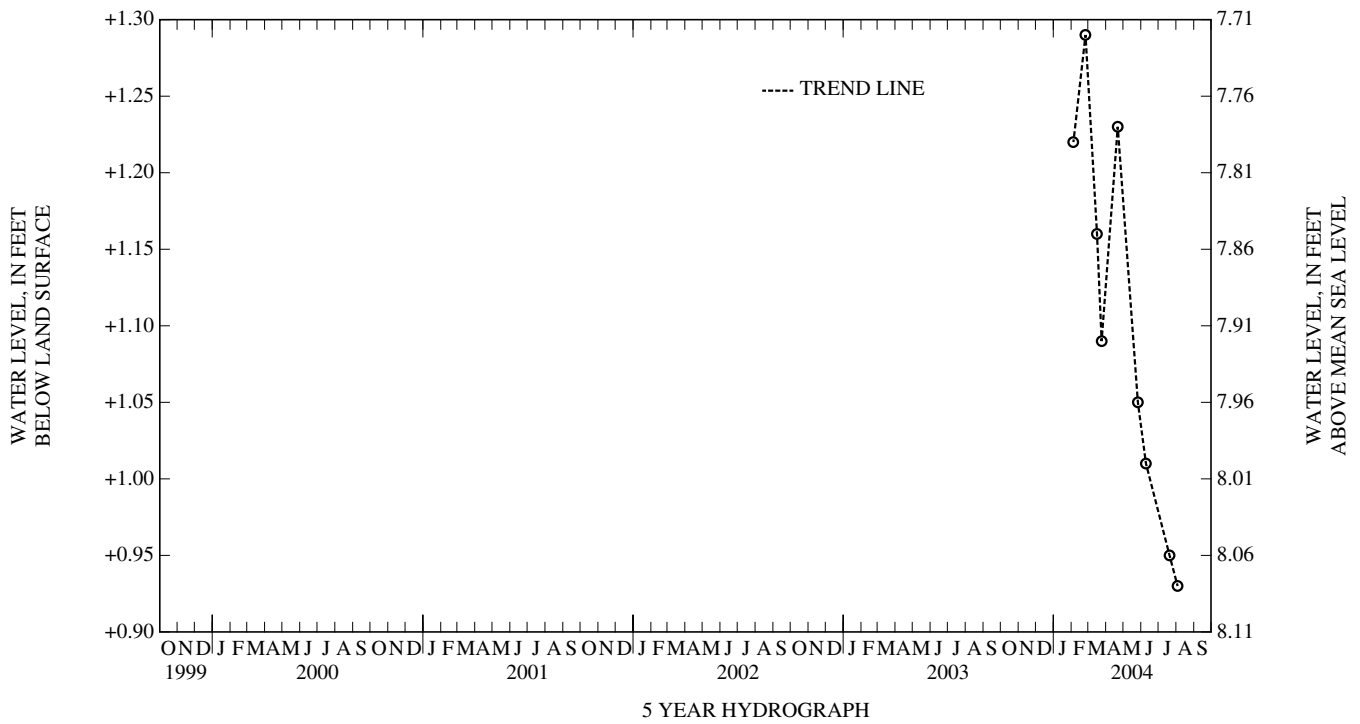
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-4-1B.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.29 ft above land surface, February 25, 2004; lowest measured, 0.93 ft above land surface, August 3, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04, 2004	+1.22	MAR 24, 2004	+1.09	JUN 09, 2004	+1.01
25	+1.29	APR 21	+1.23	JUL 20	+0.95
MAR 16	+1.16	MAY 26	+1.05	AUG 03	+0.93
HIGHEST	+1.29	FEB 25, 2004			
LOWEST	+0.93	AUG 03, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 171. SITE ID.--391659076001701. PERMIT NUMBER.--KE-94-1320

LOCATION.--Lat 39°16'59", long 76°00'17", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 39 ft; casing diameter 2 in., to 34 ft; screen diameter 2 in., from 34 to 39 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 59.71 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.43 ft above land surface.

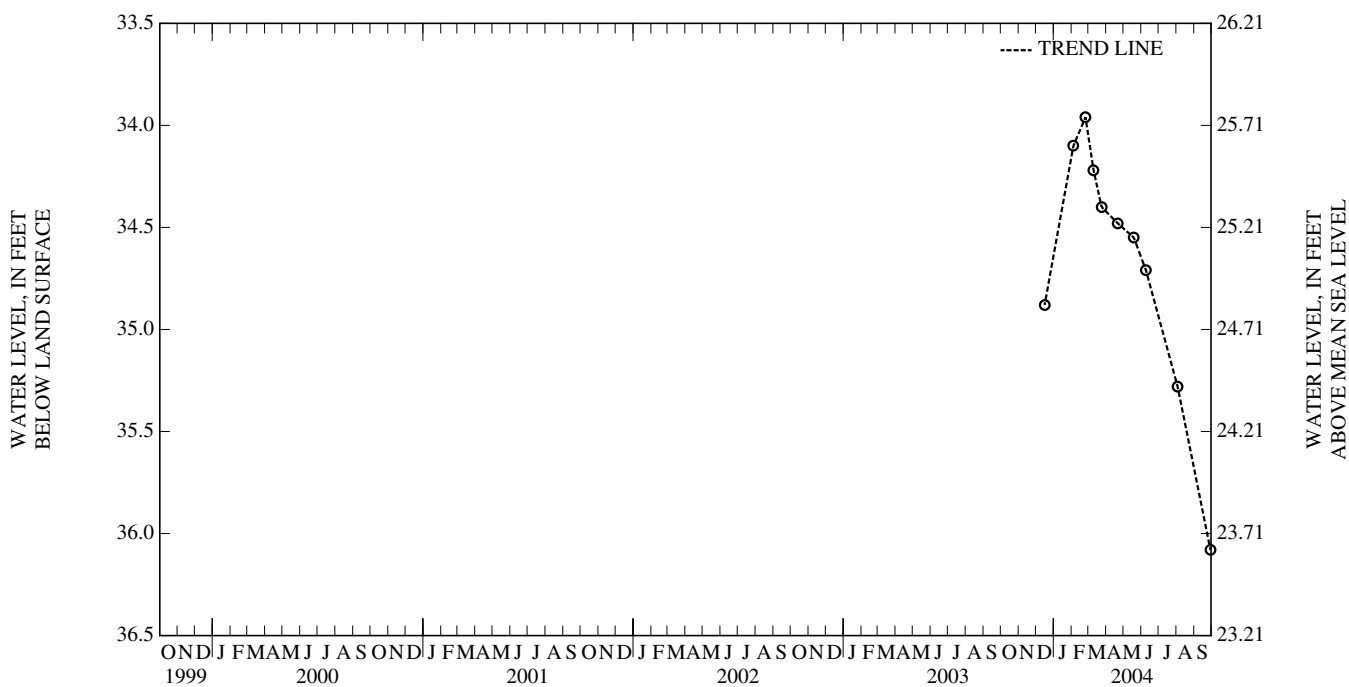
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-1A.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.96 ft below land surface, February 25, 2004; lowest measured, 36.11 ft below land surface, October 4, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	34.88	MAR 10, 2004	34.22	MAY 19, 2004	34.55	SEP 29, 2004	36.08
FEB 04, 2004	34.10	24	34.40	JUN 09	34.71		
25	33.96	APR 21	34.48	AUG 03	35.28		
HIGHEST 33.96 FEB 25, 2004							
LOWEST 36.08 SEP 29, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 172. SITE ID.--391659076001702. PERMIT NUMBER.--KE-94-1319

LOCATION.--Lat 39°16'59", long 76°00'17", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 50 ft; casing diameter 2 in., to 47 ft; screen diameter 2 in., from 47 to 50 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 59.80 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.35 ft above land surface.

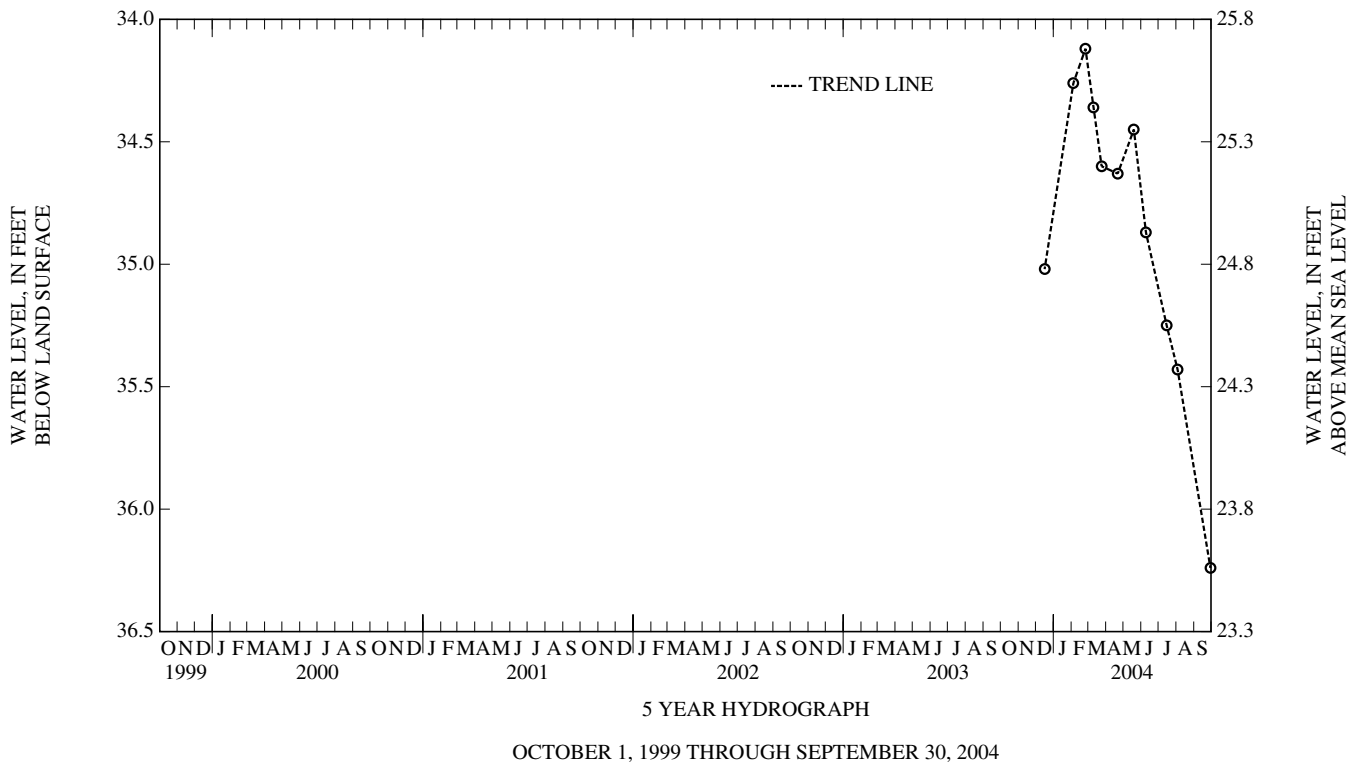
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-1B.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.12 ft below land surface, February 25, 2004; lowest measured, 36.27 ft below land surface, October 4, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	35.02	MAR 10, 2004	34.36	MAY 19, 2004	34.45	AUG 03, 2004	35.43
FEB 04, 2004	34.26	24	34.60	JUN 09	34.87	SEP 29	36.24
25	34.12	APR 21	34.63	JUL 15	35.25		
HIGHEST 34.12 FEB 25, 2004							
LOWEST 36.24 SEP 29, 2004							



KENT COUNTY—Continued

WELL NUMBER.--KE Bd 173. SITE ID.--391659076001703. PERMIT NUMBER.--KE-94-1318

LOCATION.--Lat 39°16'59", long 76°00'17", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 61.5 ft; casing diameter 2 in., to 58.5 ft; screen diameter 2 in., from 58.5 to 61.5 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 59.62 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.34 ft above land surface.

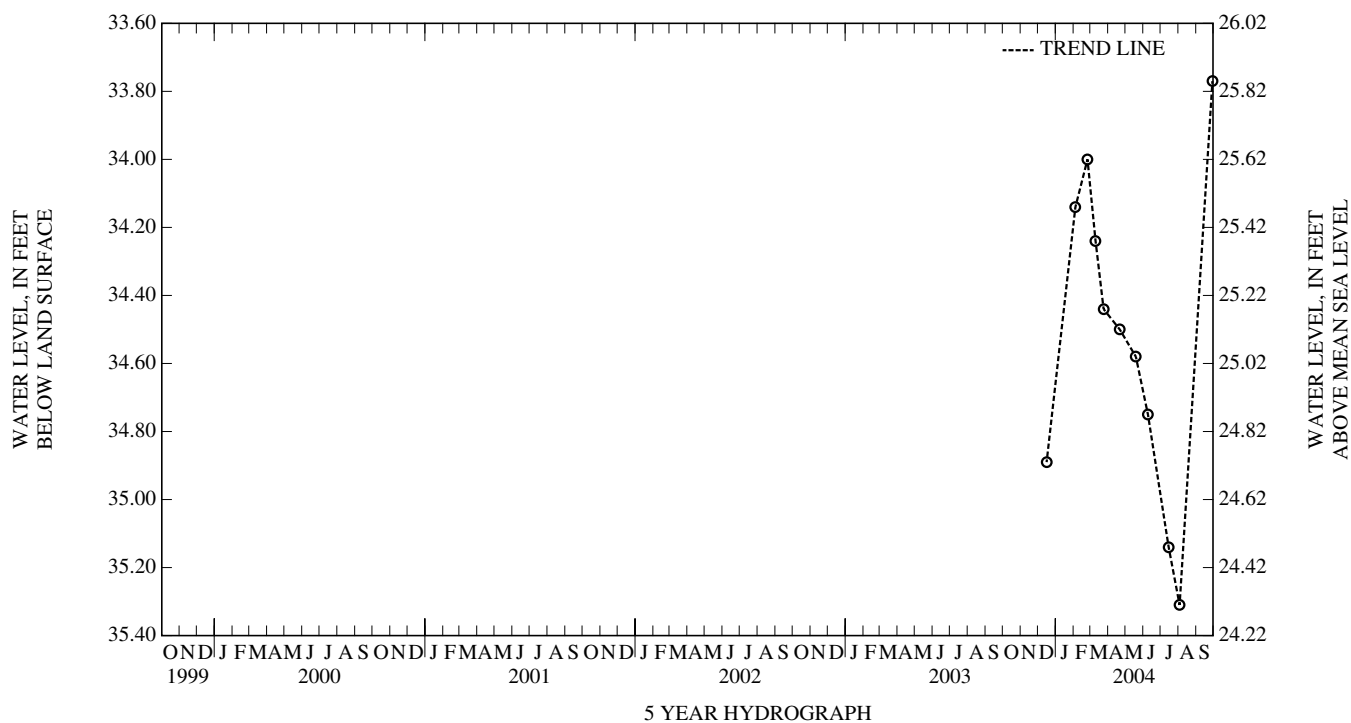
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-1C.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.77 ft below land surface, September 29, 2004; lowest measured, 36.12 ft below land surface, October 4, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	34.89	MAR 10, 2004	34.24	MAY 19, 2004	34.58	AUG 03, 2004	35.31
FEB 04, 2004	34.14	24	34.44	JUN 09	34.75	SEP 29	33.77
25	34.00	APR 21	34.50	JUL 15	35.14		
HIGHEST 33.77 SEP 29, 2004							
LOWEST 35.31 AUG 03, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 174. SITE ID.--391700076002401. PERMIT NUMBER.--KE-94-1317

LOCATION.--Lat 39°17'00", long 76°00'24", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 27 ft; casing diameter 2 in., to 24 ft; screen diameter 2 in., from 24 to 27 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 41.17 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.32 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-2A.

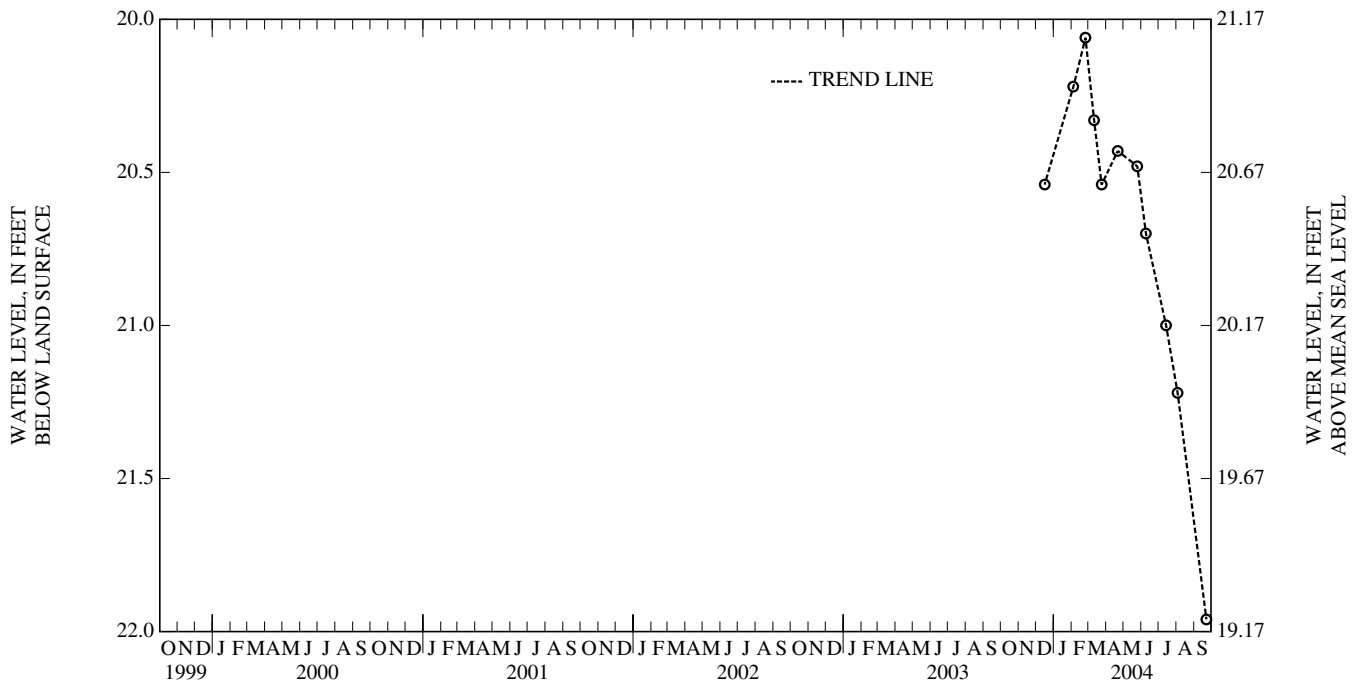
PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.06 ft below land surface, February 25, 2004; lowest measured, 21.96 ft below land surface, September 22, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	20.54	MAR 11, 2004	20.33	MAY 25, 2004	20.48	AUG 03, 2004	21.22
FEB 04, 2004	20.22	24	20.54	JUN 09	20.70	SEP 22	21.96
25	20.06	APR 21	20.43	JUL 14	21.00		

HIGHEST 20.06 FEB 25, 2004
 LOWEST 21.96 SEP 22, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 175. SITE ID.--391700076002402. PERMIT NUMBER.--KE-94-1316

LOCATION.--Lat 39°17'00", long 76°00'24", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 35 ft; casing diameter 2 in., to 32 ft; screen diameter 2 in., from 32 to 35 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 41.75 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.25 ft above land surface.

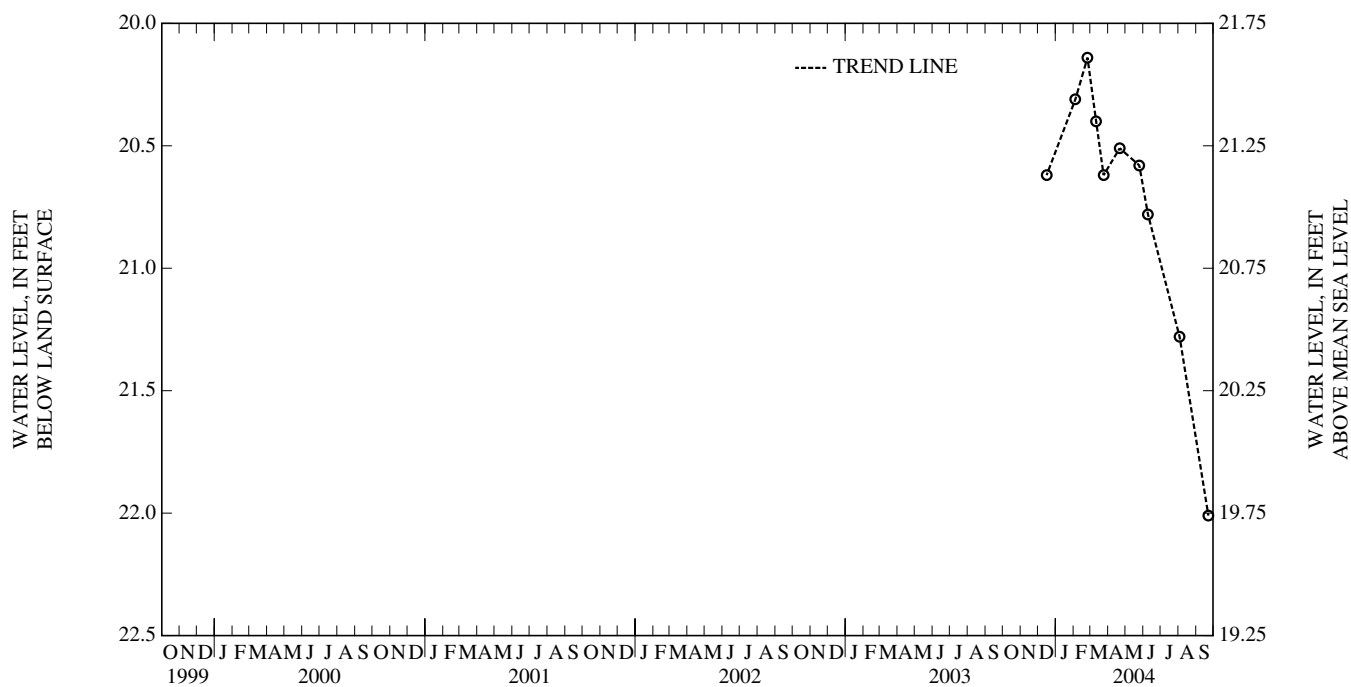
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-2B.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.14 ft below land surface, February 25, 2004; lowest measured, 22.01 ft below land surface, September 22, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	20.62	MAR 11, 2004	20.40	MAY 25, 2004	20.58	SEP 22, 2004	22.01
FEB 04, 2004	20.31	24	20.62	JUN 09	20.78		
25	20.14	APR 21	20.51	AUG 03	21.28		
HIGHEST 20.14 FEB 25, 2004							
LOWEST 22.01 SEP 22, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 176. SITE ID.--391700076002403. PERMIT NUMBER.--KE-94-1315

LOCATION.--Lat 39°17'00", long 76°00'24", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 46 ft; casing diameter 2 in., to 43 ft; screen diameter 2 in., from 43 to 46 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 41.82 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.18 ft above land surface.

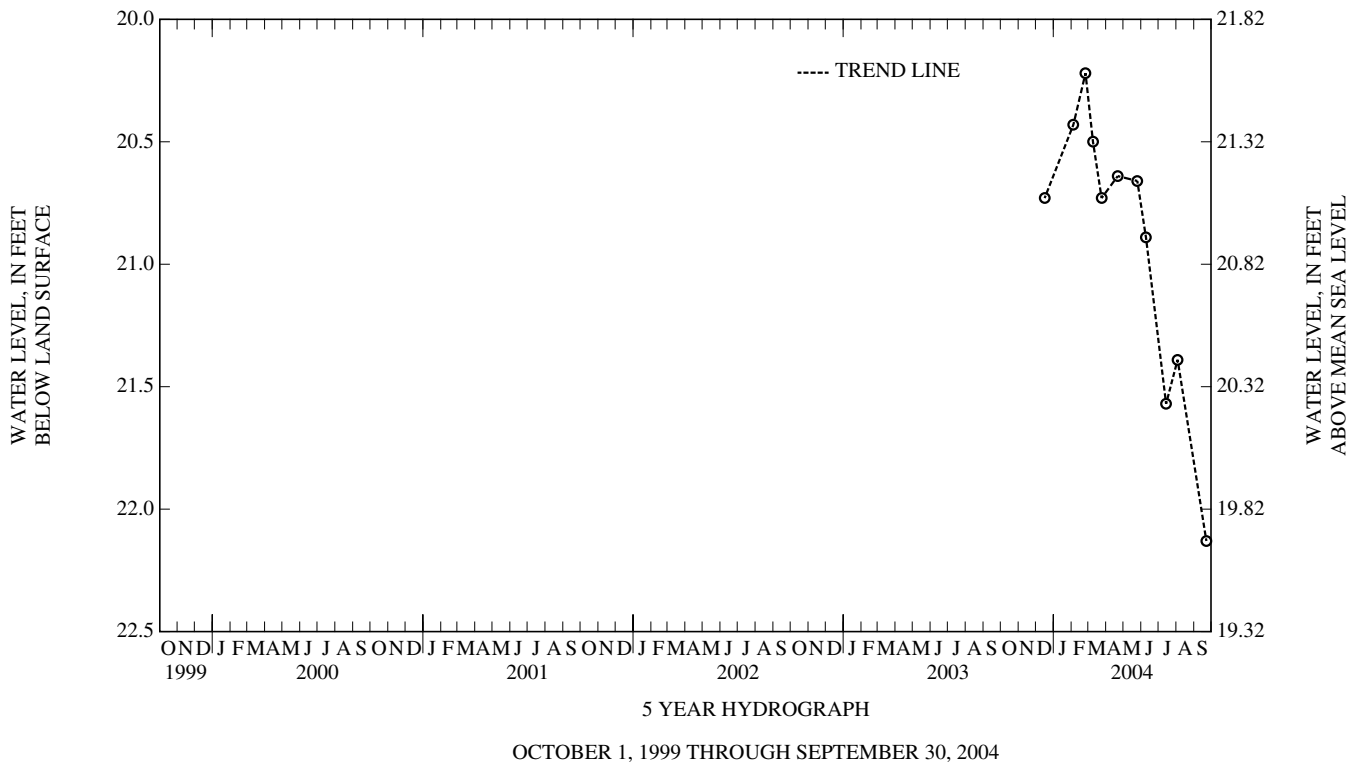
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-2C.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.22 ft below land surface, February 25, 2004; lowest measured, 22.13 ft below land surface, September 22, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	20.73	MAR 09, 2004	20.50	MAY 25, 2004	20.66	AUG 03, 2004	21.39
FEB 04, 2004	20.43	24	20.73	JUN 09	20.89	SEP 22	22.13
25	20.22	APR 21	20.64	JUL 14	21.57		
HIGHEST 20.22 FEB 25, 2004							
LOWEST 22.13 SEP 22, 2004							



KENT COUNTY—Continued

WELL NUMBER.--KE Bd 177. SITE ID.--391702076003301. PERMIT NUMBER.--KE-94-1314

LOCATION.--Lat 39°17'02", long 76°00'33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 2 in., to 16 ft; screen diameter 2 in., from 16 to 19 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 25.70 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.15 ft above land surface.

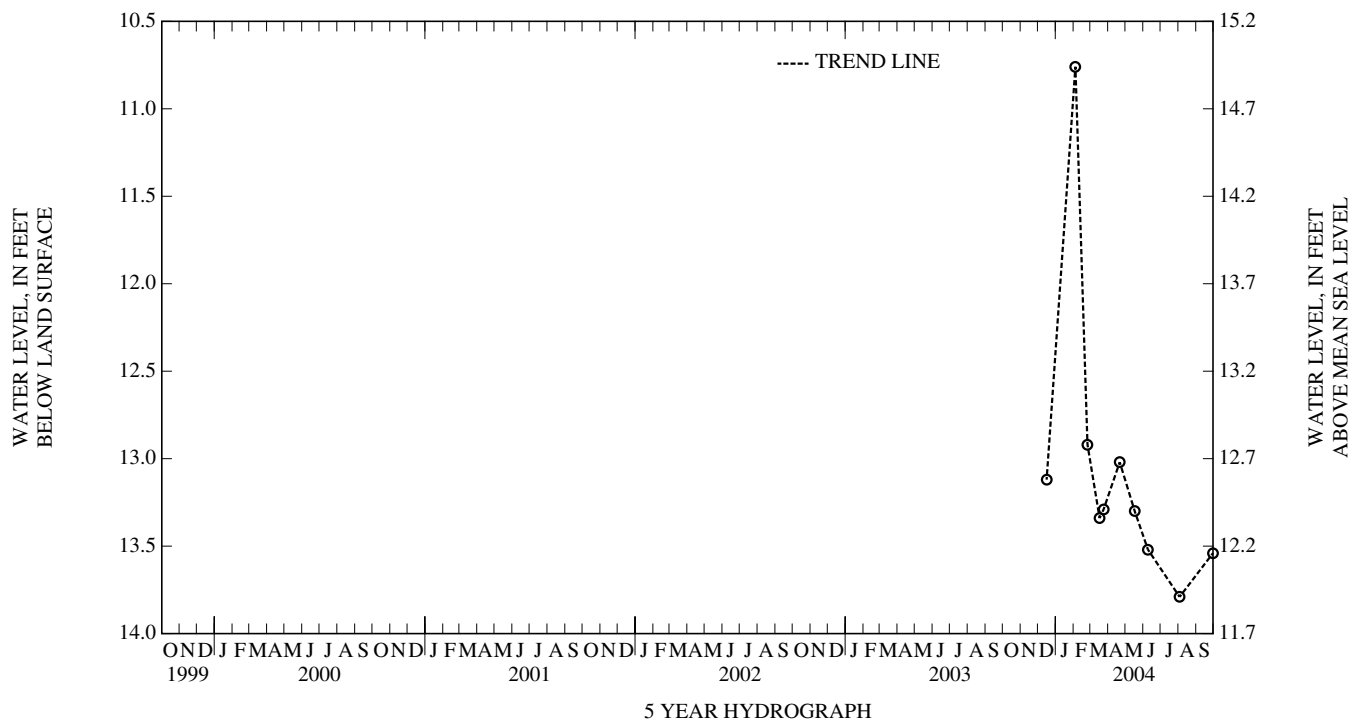
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-3A.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.76 ft below land surface, February 4, 2004; lowest measured, 13.83 ft below land surface, October 4, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	13.12	MAR 17, 2004	13.34	MAY 17, 2004	13.30	SEP 30, 2004	13.54
FEB 04, 2004	10.76	24	13.29	JUN 09	13.52		
25	12.92	APR 21	13.02	AUG 03	13.79		
HIGHEST	10.76	FEB 04, 2004					
LOWEST	13.79	AUG 03, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 178. SITE ID.--391702076003302. PERMIT NUMBER.--KE-94-1313

LOCATION.--Lat 39°17'02", long 76°00'33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 36 ft; casing diameter 2 in., to 33 ft; screen diameter 2 in., from 33 to 36 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 25.73 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.08 ft above land surface.

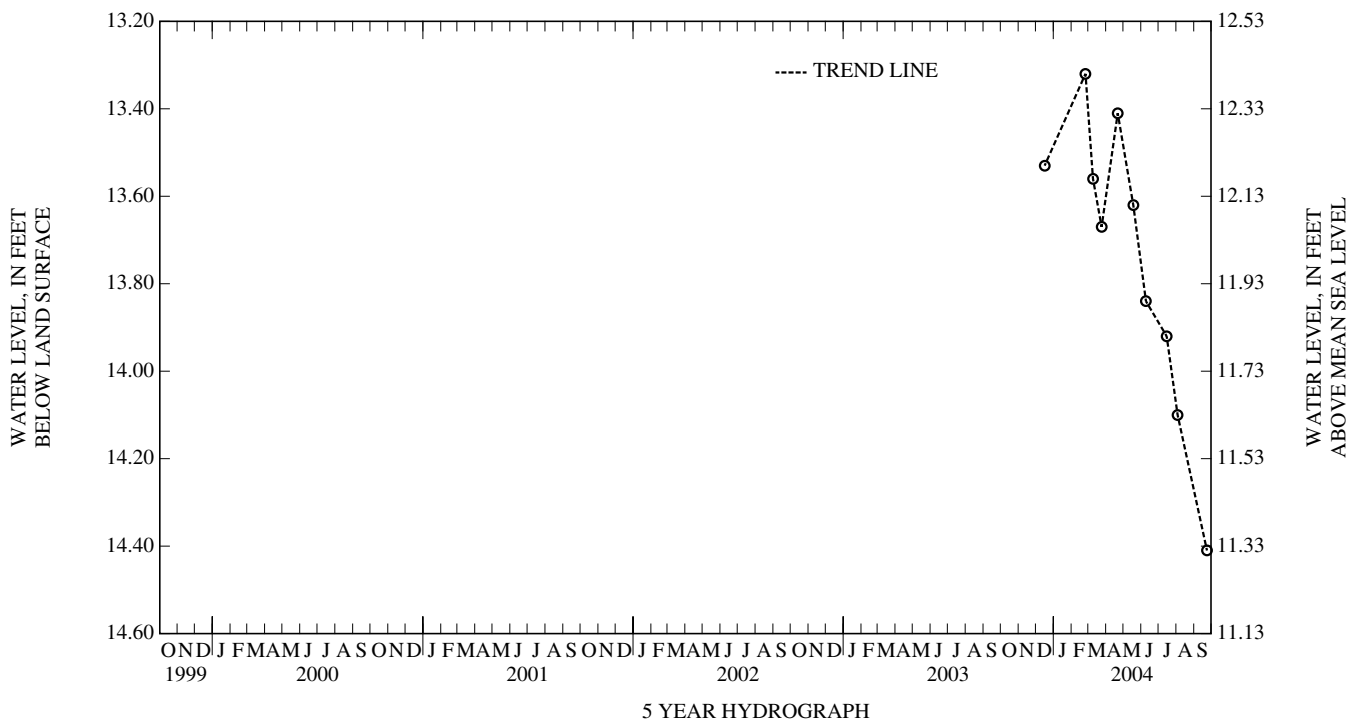
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-3B.

PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.32 ft below land surface, February 25, 2004; lowest measured, 14.41 ft below land surface, September 23, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	13.53	MAR 24, 2004	13.67	JUN 09, 2004	13.84	SEP 23, 2004	14.41
FEB 25, 2004	13.32	APR 21	13.41	JUL 15	13.92		
MAR 09	13.56	MAY 18	13.62	AUG 03	14.10		
HIGHEST 13.32 FEB 25, 2004							
LOWEST 14.41 SEP 23, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 179. SITE ID.--391702076003303. PERMIT NUMBER.--KE-94-1312

LOCATION.--Lat 39°17'02", long 76°00'33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Hornerstown Formation. Aquifer code: 125HRRS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 50 ft; casing diameter 2 in., to 47 ft; screen diameter 2 in., from 47 to 50 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 25.58 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 2.26 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-3C.

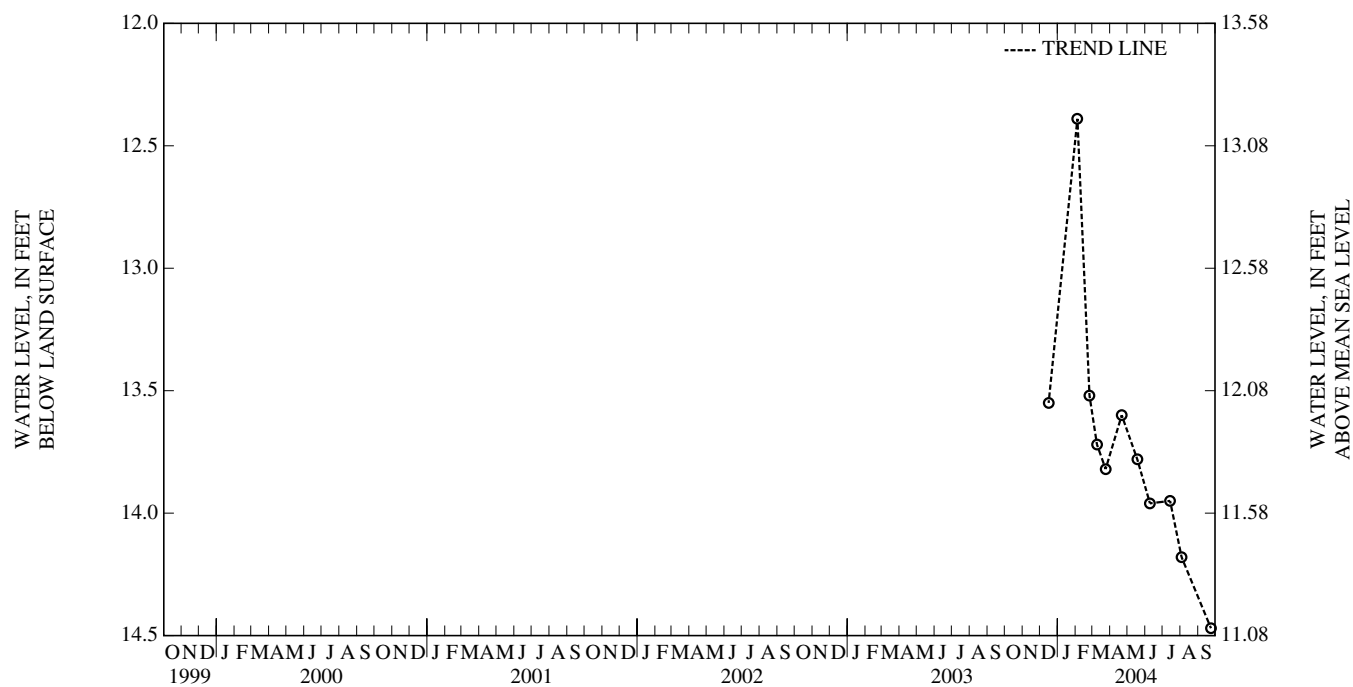
PERIOD OF RECORD.-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.39 ft below land surface, February 4, 2004; lowest measured, 14.47 ft below land surface, September 23, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16, 2003	13.55	MAR 09, 2004	13.72	MAY 18, 2004	13.78	AUG 03, 2004	14.18
FEB 04, 2004	12.39	24	13.82	JUN 09	13.96	SEP 23	14.47
25	13.52	APR 21	13.60	JUL 14	13.95		

HIGHEST 12.39 FEB 04, 2004
 LOWEST 14.47 SEP 23, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 180. SITE ID.--391657076003602.

LOCATION.--Lat 39°16'57", long 76°00'37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.7 ft; casing diameter 2 in., to 8.2 ft; screen diameter 2 in., from 8.2 to 8.7 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.87 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 3.60 ft above land surface.

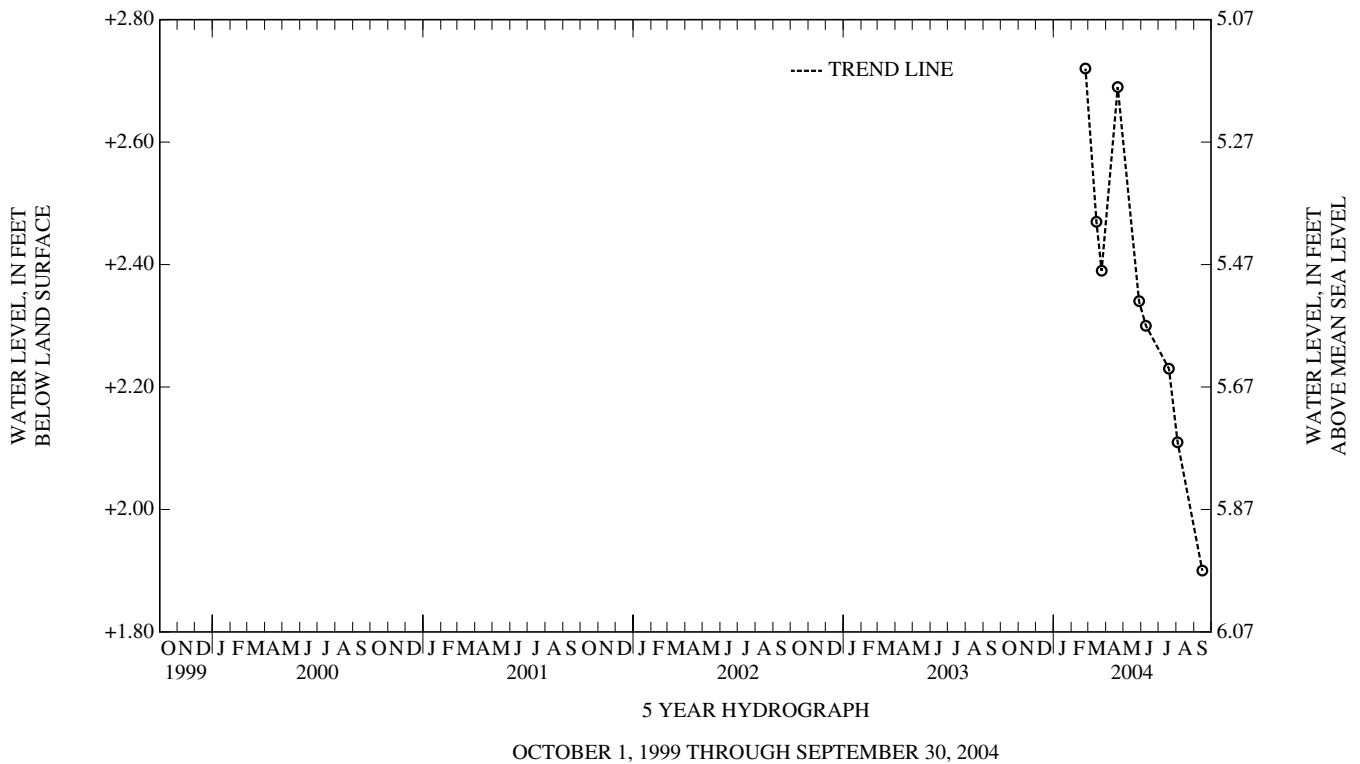
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-5B.

PERIOD OF RECORD.-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.72 ft above land surface, February 25, 2004; lowest measured, 1.90 ft above land surface, September 15, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	+2.72	APR 21, 2004	+2.69	JUL 19, 2004	+2.23
MAR 15	+2.47	MAY 28	+2.34	AUG 03	+2.11
24	+2.39	JUN 09	+2.30	SEP 15	+1.90
HIGHEST	+2.72	FEB 25, 2004			
LOWEST	+1.90	SEP 15, 2004			



KENT COUNTY—Continued

WELL NUMBER.--KE Bd 181. SITE ID.--391643076002101. PERMIT NUMBER.--KE-94-1210.

LOCATION.--Lat 39°16'43", long 76°00'21", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 41 ft; casing diameter 1 in., to 36 ft; screen diameter 1 in., from 36 to 41 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 62.87 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.45 ft above land surface.

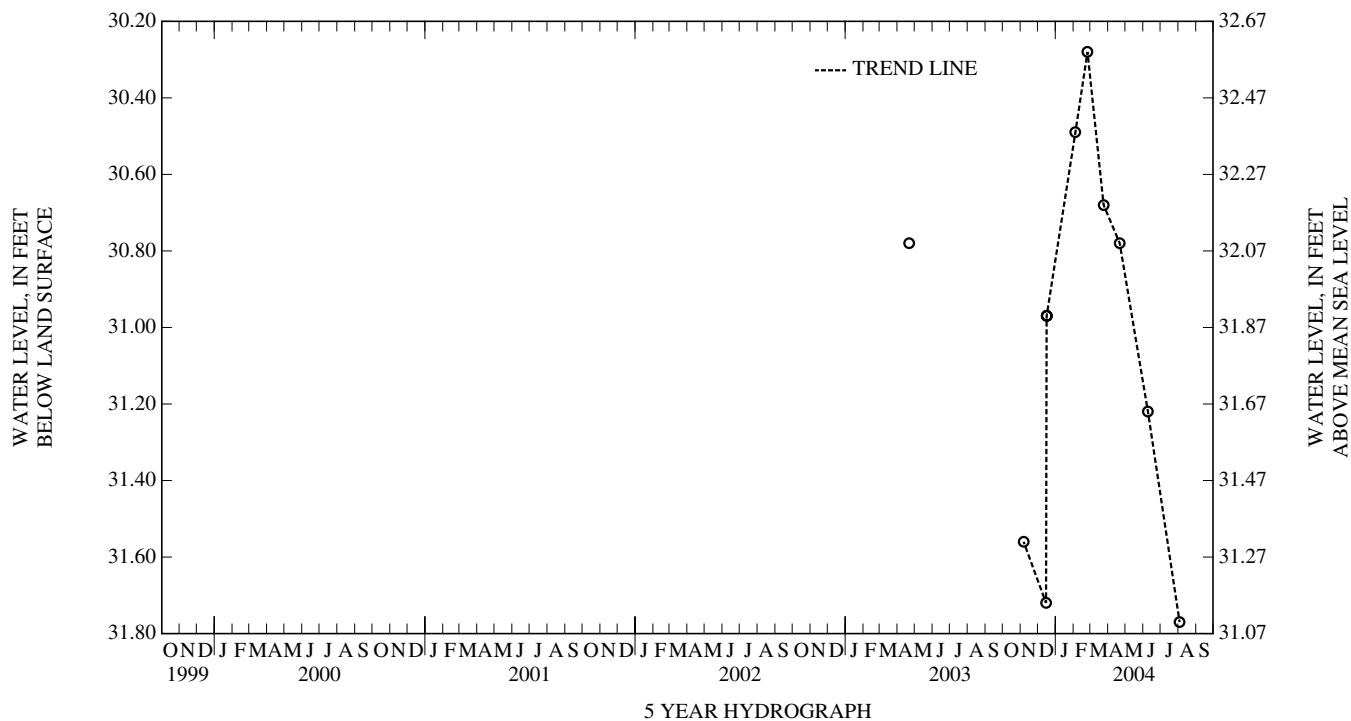
REMARKS.--NAWQA ACT study observation well. Local well name is GP-10.

PERIOD OF RECORD.-- April 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.28 ft below land surface, February 25, 2004; lowest measured, 32.43 ft below land surface, October 4, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	31.56	FEB 04, 2004	30.49	APR 21, 2004	30.78
DEC 15	31.72	25	30.28	JUN 09	31.22
16	30.97	MAR 24	30.68	AUG 03	31.77
HIGHEST 30.28 FEB 25, 2004					
LOWEST 32.43 OCT 04, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 182. SITE ID.--391654076000901. PERMIT NUMBER.--KE-94-1211.

LOCATION.--Lat 39°16'54", long 76°00'09", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 28 ft; casing diameter 1 in., to 23 ft; screen diameter i in., from 23 to 28 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 49.84 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.30 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is GP-11.

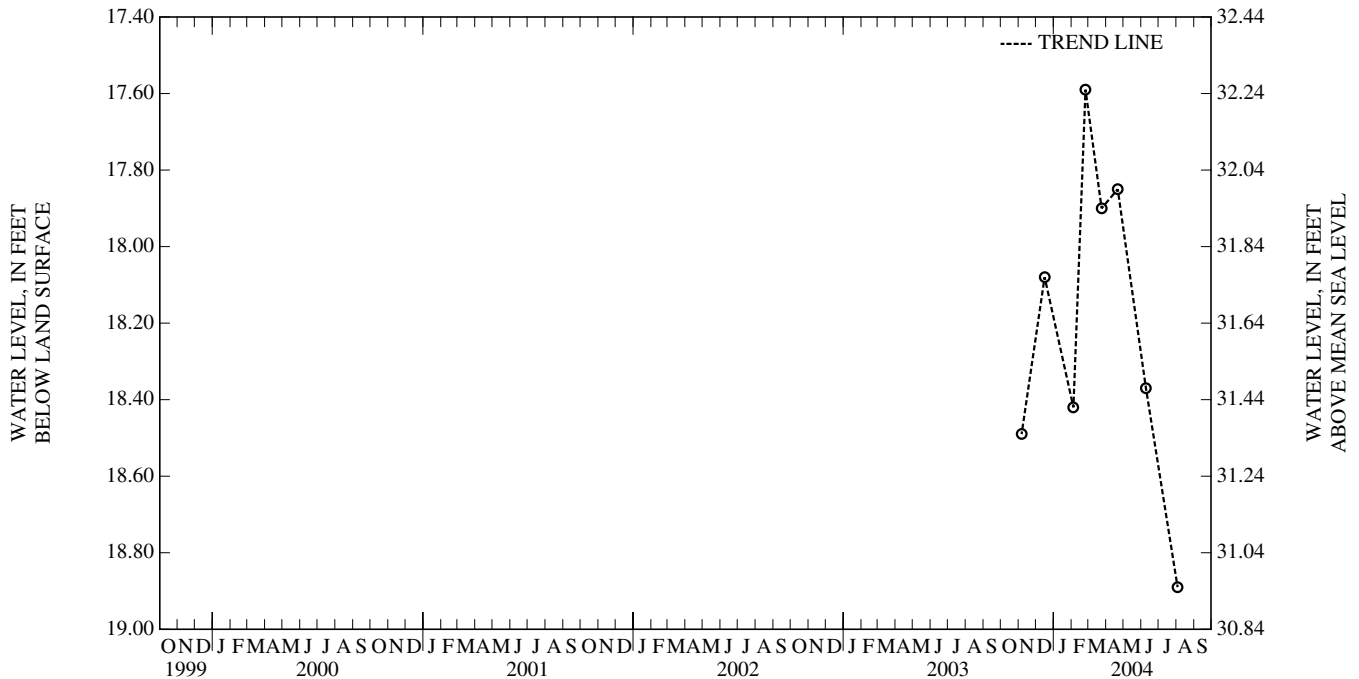
PERIOD OF RECORD.-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.59 ft below land surface, February 25, 2004; lowest measured, 19.44 ft below land surface, October 4, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	18.49	FEB 04, 2004	18.42	MAR 24, 2004	17.90	JUN 09, 2004	18.37
DEC 16	18.08	25	17.59	APR 21	17.85	AUG 03	18.89

HIGHEST 17.59 FEB 25, 2004
 LOWEST 18.89 AUG 03, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 183. SITE ID.--391700076001701. PERMIT NUMBER.--KE-94-1212.

LOCATION.--Lat 39°17'00", long 76°00'17", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 44 ft; casing diameter 1 in., to 39 ft; screen diameter 1 in., from 39 to 44 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 59.68 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.25 ft above land surface.

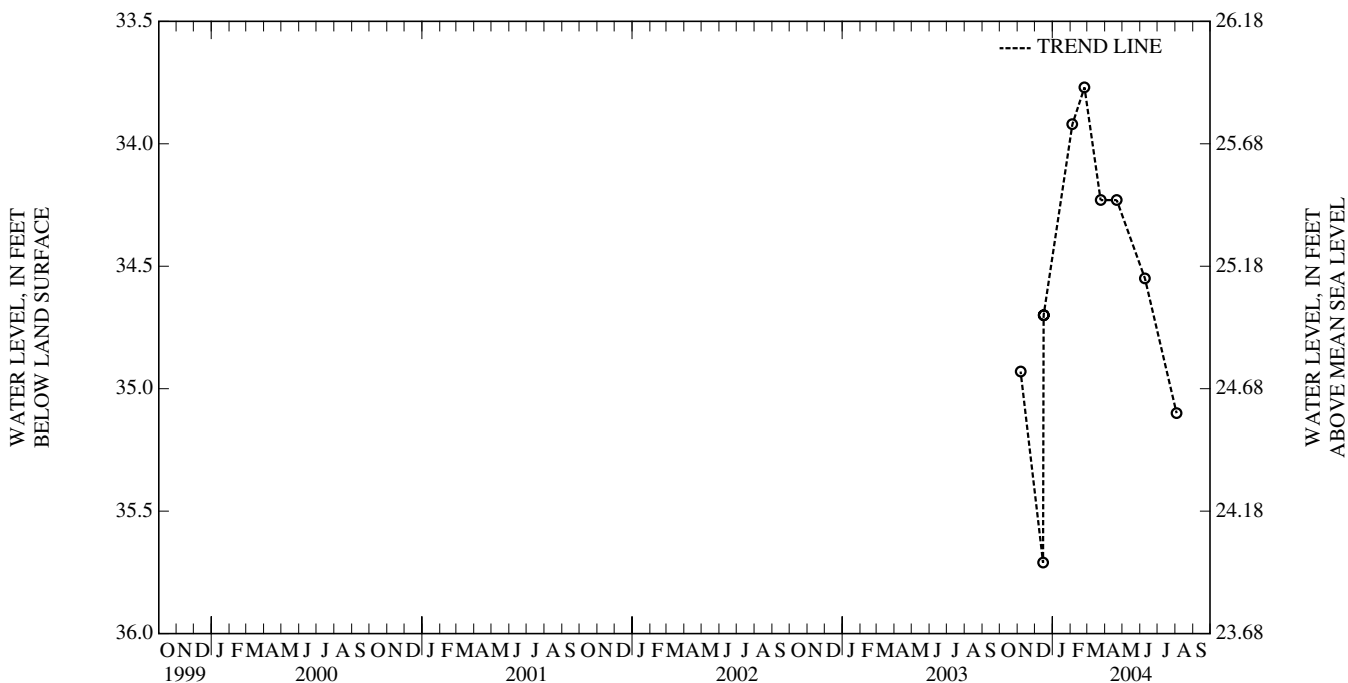
REMARKS.--NAWQA ACT study observation well. Local well name is GP-12.

PERIOD OF RECORD.-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.77 ft below land surface, February 25, 2004; lowest measured, 35.97 ft below land surface, October 4, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	34.93	FEB 04, 2004	33.92	APR 21, 2004	34.23
DEC 15	35.71	25	33.77	JUN 09	34.55
16	34.70	MAR 24	34.23	AUG 03	35.10
HIGHEST 33.77 FEB 25, 2004					
LOWEST 35.97 OCT 04, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 184. SITE ID.--391711076001901. PERMIT NUMBER.--KE-94-1212.

LOCATION.--Lat 39°17'11", long 76°00'19", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 28 ft; casing diameter 1 in., to 23 ft; screen diameter 1 in., from 23 to 28 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 36.31 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.35 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is GP-13.

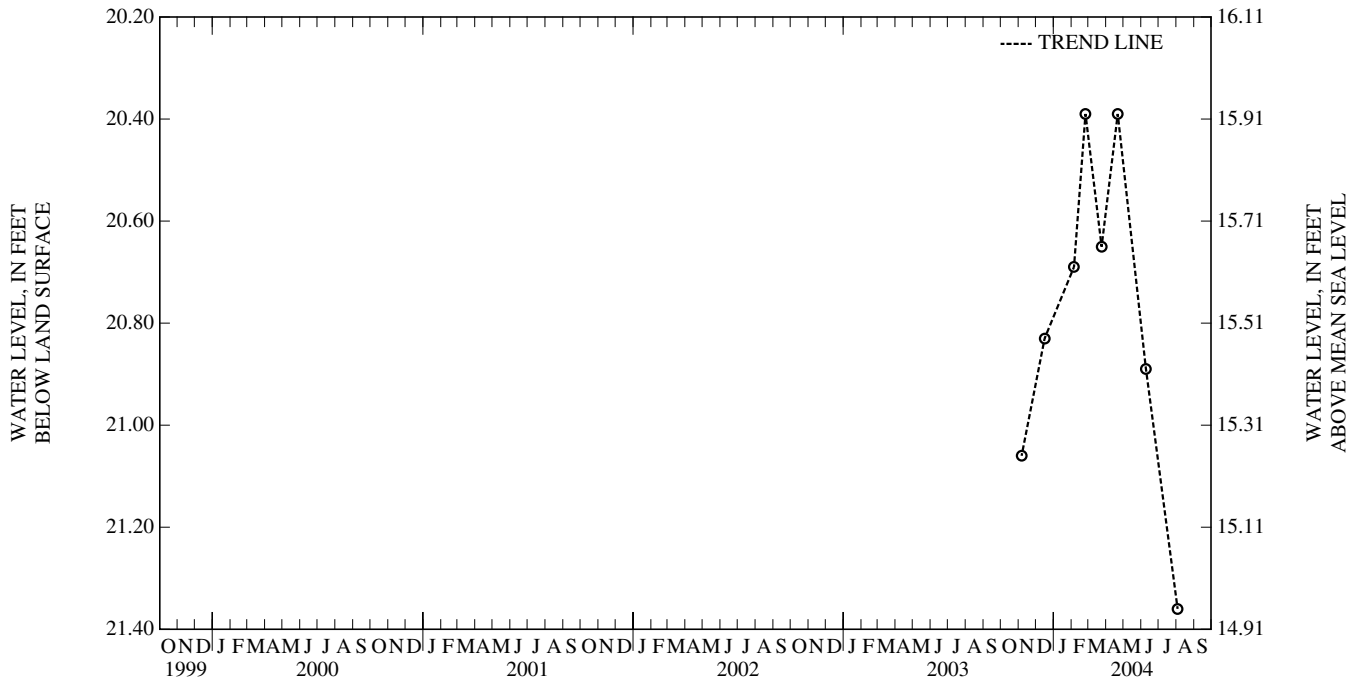
PERIOD OF RECORD.-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.39 ft below land surface, February 25, 2004 and April 21, 2004; lowest measured, 21.51 ft below land surface, December 15, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	21.06	FEB 05, 2004	20.69	MAR 24, 2004	20.65	JUN 09, 2004	20.89
DEC 16	20.83	25	20.39	APR 21	20.39	AUG 03	21.36

HIGHEST 20.39 FEB 25, 2004 APR 21, 2004
 LOWEST 21.36 AUG 03, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 185. SITE ID.--391703076003201. PERMIT NUMBER.--KE-94-1214.

LOCATION.--Lat 39°17'03", long 76°00'32", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 25 ft; casing diameter 1 in., to 20 ft; screen diameter 1 in., from 20 to 25 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 30.03 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.24 ft above land surface.

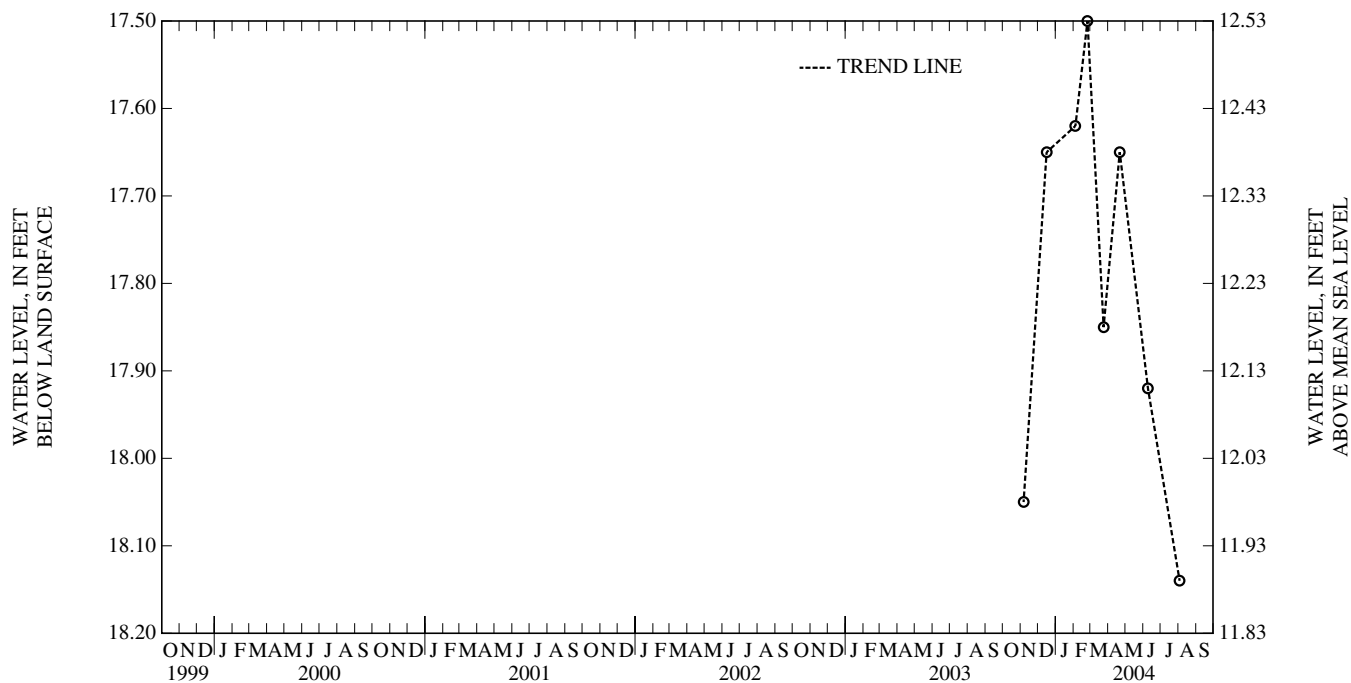
REMARKS.--NAWQA ACT study observation well. Local well name is GP-14.

PERIOD OF RECORD.-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.50 ft below land surface, February 25, 2004; lowest measured, 18.25 ft below land surface, October 4, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	18.05	FEB 04, 2004	17.62	MAR 24, 2004	17.85	JUN 09, 2004	17.92
DEC 16	17.65	25	17.50	APR 21	17.65	AUG 03	18.14
HIGHEST 17.50 FEB 25, 2004							
LOWEST 18.14 AUG 03, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 186. SITE ID.--391653076003701. PERMIT NUMBER.--KE-94-1215.

LOCATION.--Lat 39°16'53", long 76°00'37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 21 ft; casing diameter 1 in., to 16 ft; screen diameter 1 in., from 16 to 21 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 26.27 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.24 ft above land surface.

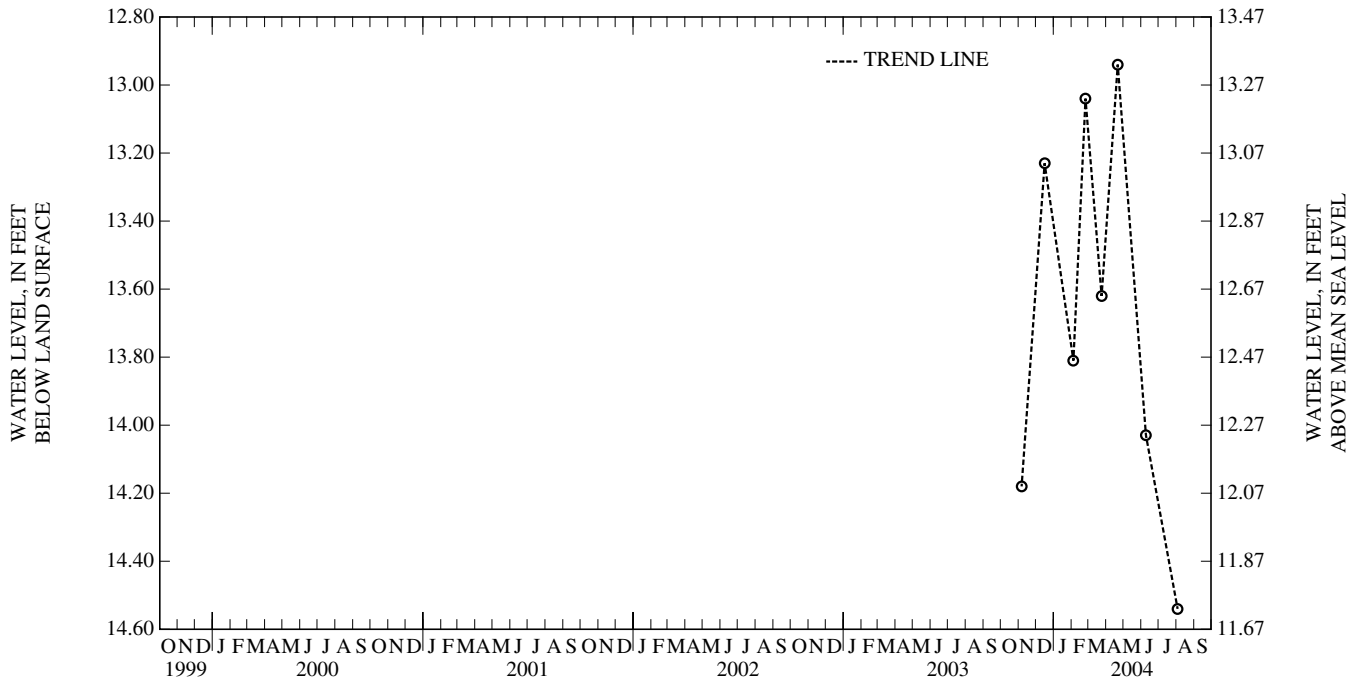
REMARKS.--NAWQA ACT study observation well. Local well name is GP-15.

PERIOD OF RECORD.-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.94 ft below land surface, April 21, 2004; lowest measured, 14.54 ft below land surface, August 3, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	14.18	FEB 04, 2004	13.81	MAR 24, 2004	13.62	JUN 09, 2004	14.03
DEC 16	13.23	25	13.04	APR 21	12.94	AUG 03	14.54
HIGHEST 12.94		APR 21, 2004					
LOWEST 14.54		AUG 03, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 187. SITE ID.--391651076002901. PERMIT NUMBER.--KE-94-1222.

LOCATION.--Lat 39°16'51", long 76°00'29", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 19 ft; casing diameter 1 in., to 14 ft; screen diameter 1 in., from 14 to 19 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 35.84 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.25 ft above land surface.

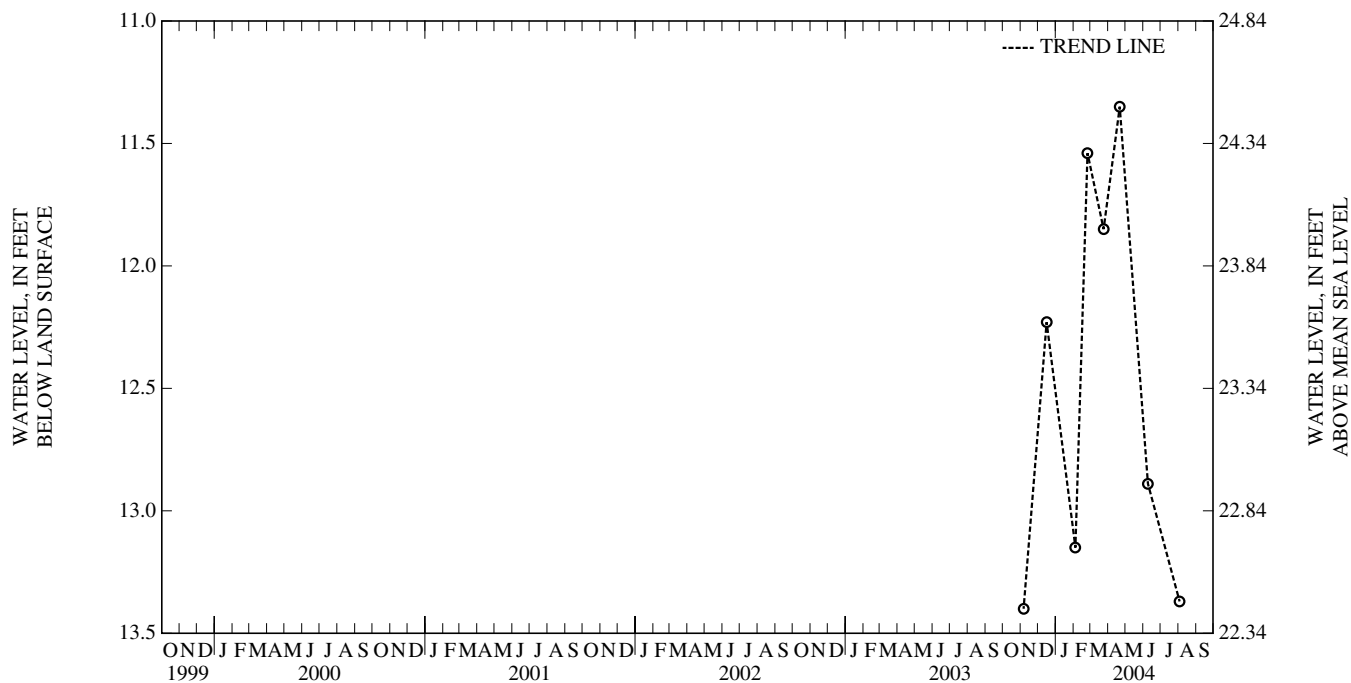
REMARKS.--NAWQA ACT study observation well. Local well name is GP-16.

PERIOD OF RECORD.-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.35 ft below land surface, April 21, 2004; lowest measured, 13.40 ft below land surface, November 6, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	13.40	FEB 04, 2004	13.15	MAR 24, 2004	11.85	JUN 09, 2004	12.89
DEC 16	12.23	25	11.54	APR 21	11.35	AUG 03	13.37
HIGHEST 11.35 APR 21, 2004							
LOWEST 13.40 NOV 06, 2003							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 188. SITE ID.--391654076000902. PERMIT NUMBER.--KE-94-1223.

LOCATION.--Lat 39°16'54", long 76°00'10", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, artesian well, depth 39 ft; casing diameter 1 in., to 36 ft; screen diameter 1 in., from 36 to 39 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 50.13 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.20 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is GP-17.

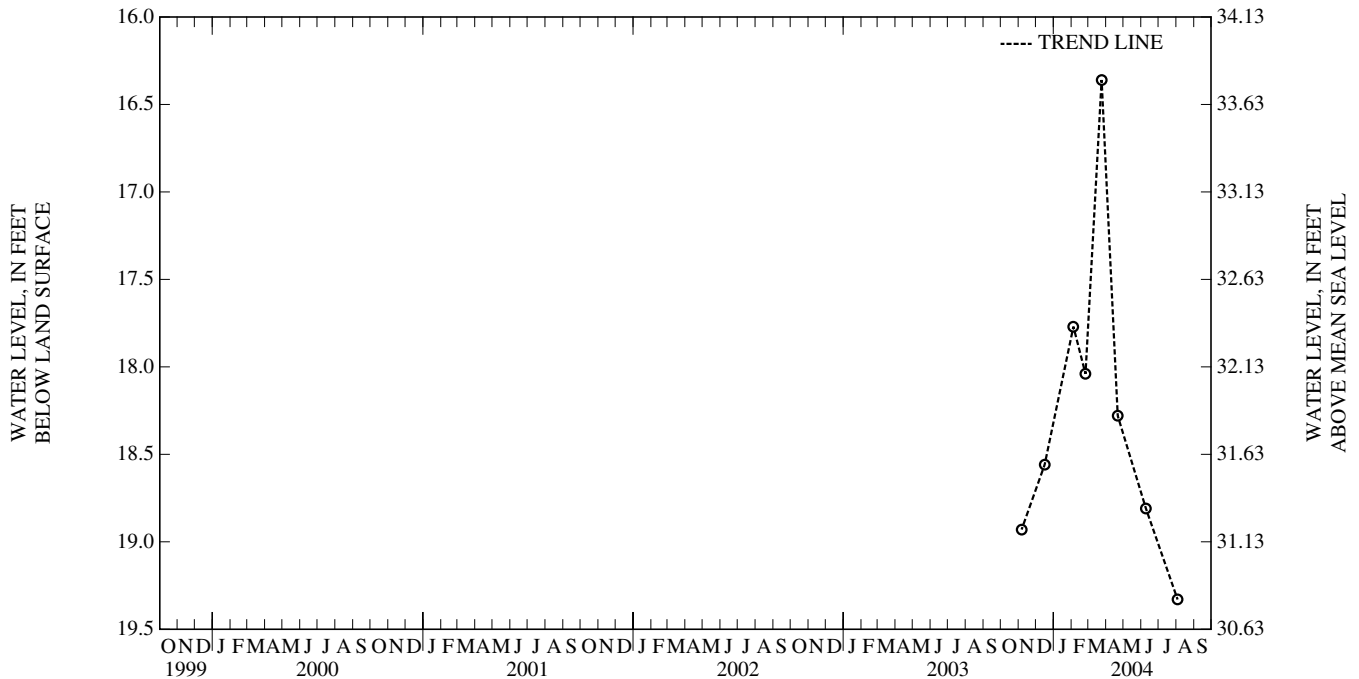
PERIOD OF RECORD.-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.36 ft below land surface, March 24, 2004; lowest measured, 21.65 ft below land surface, December 15, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	18.93	FEB 04, 2004	17.77	MAR 24, 2004	16.36	JUN 09, 2004	18.81
DEC 16	18.56	25	18.04	APR 21	18.28	AUG 03	19.33

HIGHEST 16.36 MAR 24, 2004
 LOWEST 19.33 AUG 03, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bd 189. SITE ID.--391707076002801. PERMIT NUMBER.--KE-94-1224.

LOCATION.--Lat 39°17'07", long 76°00'28", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 5 ft; casing diameter 1 in., to 3 ft; screen diameter 1 in., from 3 to 5 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 10.34 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 1.13 ft above land surface.

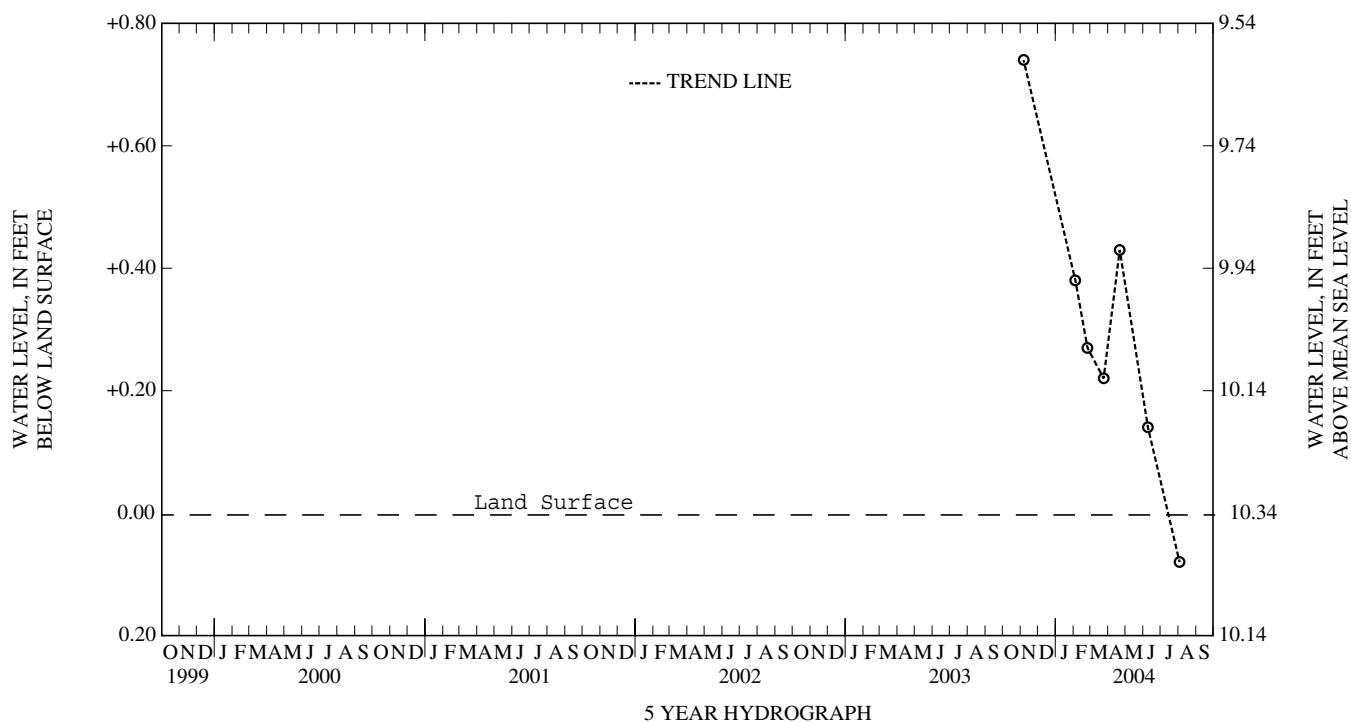
REMARKS.--NAWQA ACT study observation well. Local well name is DP-1.

PERIOD OF RECORD.-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.74 ft above land surface, November 6, 2003; lowest measured, 0.08 ft below land surface, August 3, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	+0.74	FEB 25, 2004	+0.27	APR 21, 2004	+0.43	AUG 03, 2004	.08
FEB 04, 2004	+0.38	MAR 24	+0.22	JUN 09	+0.14		
HIGHEST	+0.74	NOV 06, 2003					
LOWEST	.08	AUG 03, 2004					



KENT COUNTY—Continued

WELL NUMBER.--KE Bd 190. SITE ID.--391652076004301. PERMIT NUMBER.--KE-94-1216.

LOCATION.--Lat 39°16'53", long 76°00'43", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 7 ft; casing diameter 1 in., to 5 ft; screen diameter 1 in., from 5 to 7 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 6.88 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 3.40 ft above land surface.

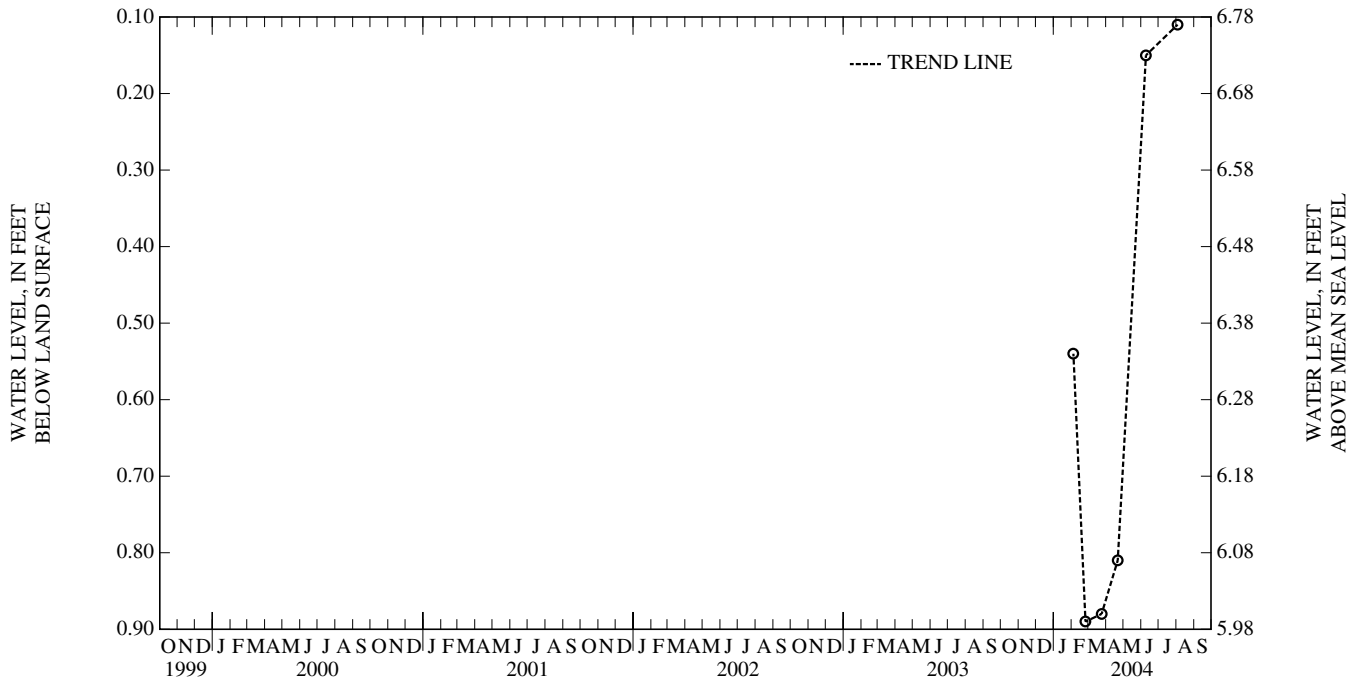
REMARKS.--NAWQA ACT study observation well. Local well name is DP-2.

PERIOD OF RECORD.--February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft below land surface, October 4, 2004; lowest measured, 0.89 ft below land surface, February 25, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04, 2004	.54	MAR 24, 2004	.88	JUN 09, 2004	.15
25	.89	APR 21	.81	AUG 03	.11
HIGHEST .11 AUG 03, 2004					
LOWEST .89 FEB 25, 2004					



KENT COUNTY—Continued

WELL NUMBER.--KE Bd 191. SITE ID.--391658076003701. PERMIT NUMBER.--KE-94-1247.

LOCATION.--Lat 39°16'58", long 76°00'37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER.--Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 6 ft; casing diameter 1 in., to 4 ft; screen diameter 1 in., from 4 to 6 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 6.53 ft, surveyed, above North American Vertical Datum Of 1988. Measuring point: Top of casing, 0.75 ft above land surface.

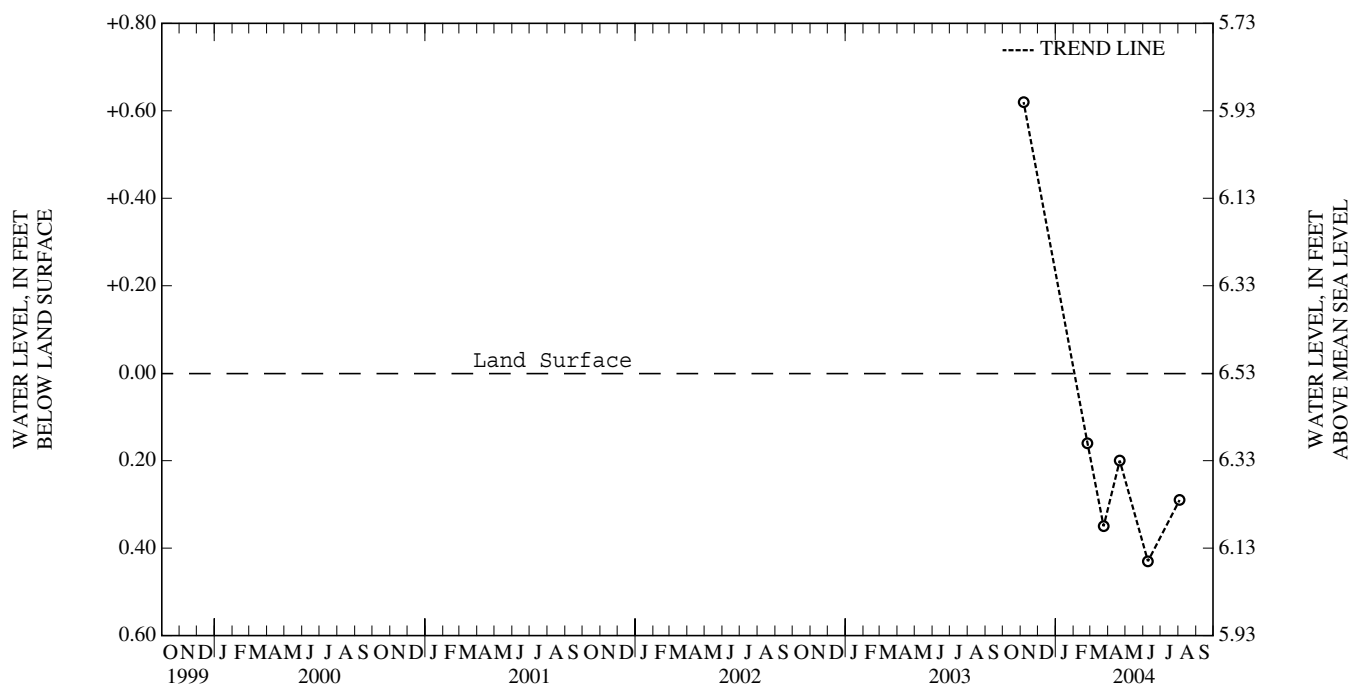
REMARKS.--NAWQA ACT study observation well. Local well name is DP-4.

PERIOD OF RECORD.--November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.62 ft above land surface, November 6, 2003; lowest measured, 0.43 ft below land surface, June 9, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 2003	+.62	MAR 24, 2004	.35	JUN 09, 2004	.43
FEB 25, 2004	.16	APR 21	.20	AUG 03	.29
HIGHEST	+.62	NOV 06, 2003			
LOWEST	.43	JUN 09, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Be 43. SITE ID.--391823075594701. PERMIT NUMBER.--KE-73-0659.

LOCATION.--Lat 39°18'23", long 75°59'45", Hydrologic Unit 02060002, at Kennedyville. Owner: U.S. Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 297 ft; casing diameter 10 in., to 171 ft; casing diameter 4 in., to 275 ft, and 285 to 297 ft; screen diameter 4 in., from 275 to 285 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1986 to April 1991.

DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

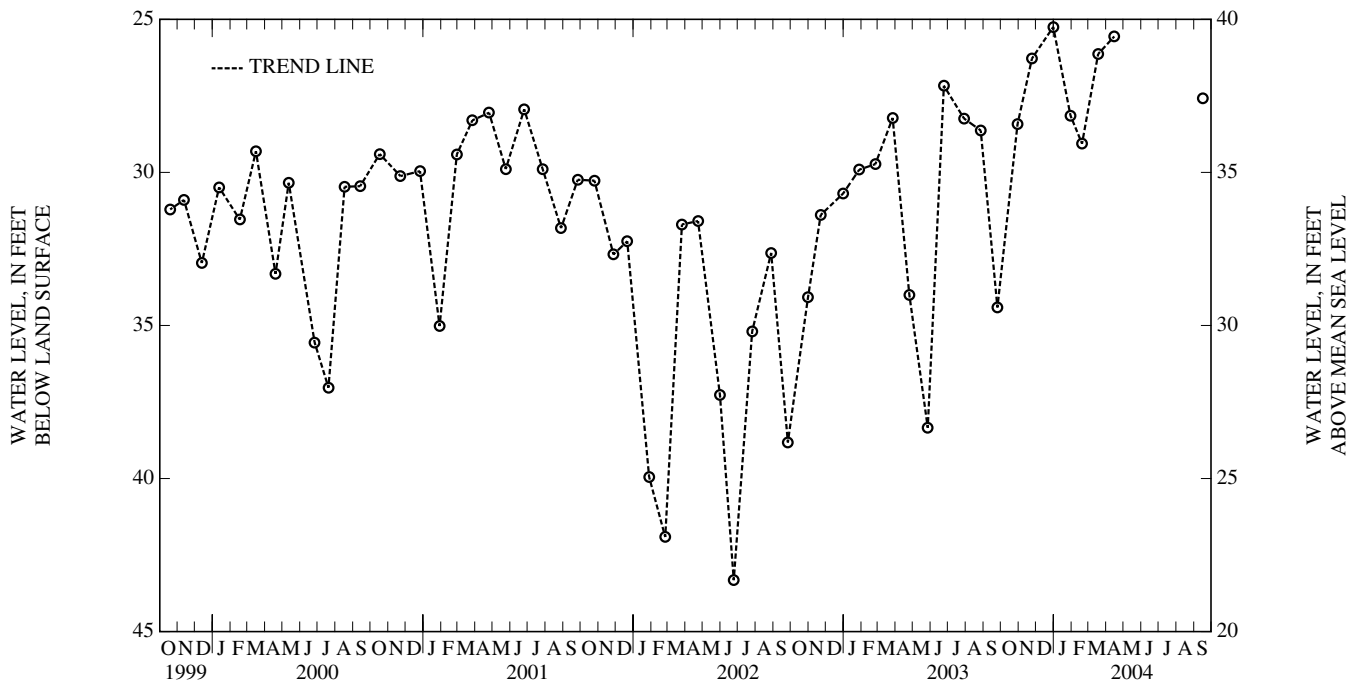
PERIOD OF RECORD.--February 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.31 ft below land surface, June 5, 1979; lowest measured, 43.32 ft below land surface, June 24, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	28.42	DEC 31, 2003	25.25	FEB 19, 2004	29.06	APR 15, 2004	25.56
NOV 24	26.28	JAN 30, 2004	28.15	MAR 18	26.13	SEP 16	27.58

HIGHEST 25.25 DEC 31, 2003
 LOWEST 29.06 FEB 19, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Be 171. SITE ID.--391643075550901. PERMIT NUMBER.--KE-88-0257.

LOCATION.--Lat 39°16'43", long 75°55'06", Hydrologic Unit 02060002, 0.9 mi south of Chesterville on Rt. 290, at Angelica Nursery. Owner: Maryland Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 440 ft; casing diameter 4 in., to 425 ft; screen diameter 4 in., from 425 to 435 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from April 1992 to October 1993. Twice yearly water level measurements from October 1991 to October 2002. Monthly water level measurements from January 2003 to February 2004.

DATUM.--Elevation of land surface is 41.41 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.30 ft above land surface.

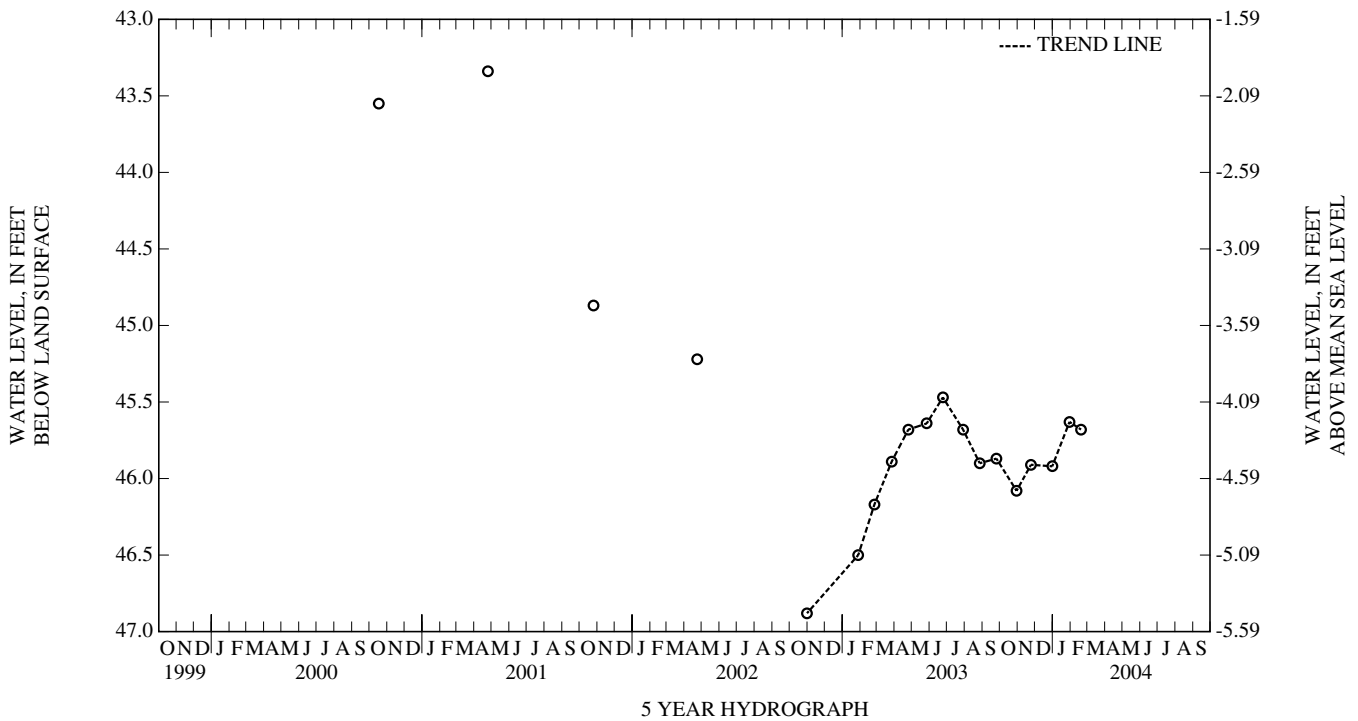
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water Levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--October 1991 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.76 ft below land surface, April 2, 1992; lowest measured, 46.88 ft below land surface, October 31, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	46.08	DEC 31, 2003	45.92	FEB 19, 2004	45.68
NOV 24	45.91	JAN 30, 2004	45.63		
HIGHEST 45.63 JAN 30, 2004					
LOWEST 46.08 OCT 30, 2003					



OCTOBER 1, 1995 THROUGH SEPTEMBER 30, 2000

KENT COUNTY—Continued

WELL NUMBER.--KE Be 189. SITE ID.--391820075580201. PERMIT NUMBER.--KE-94-0248.

LOCATION.--Lat 39°18'20", long 75°58'02", Hydrologic Unit 02060002, 1.1 mile southeast on MD 298 from intersection of MD 298 and MD 213. Owner: U.S. Geological Survey.

AQUIFER.--Horerstown Formation. Aquifer code: 125 HRSS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 53.0 ft; casing diameter 2 in., to 50.5 ft; screen diameter 2 in., from 50.5 to 53.0 ft.

INSTRUMENTATION.--Occasional measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 38.85 ft, surveyed, above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.12 ft below land surface.

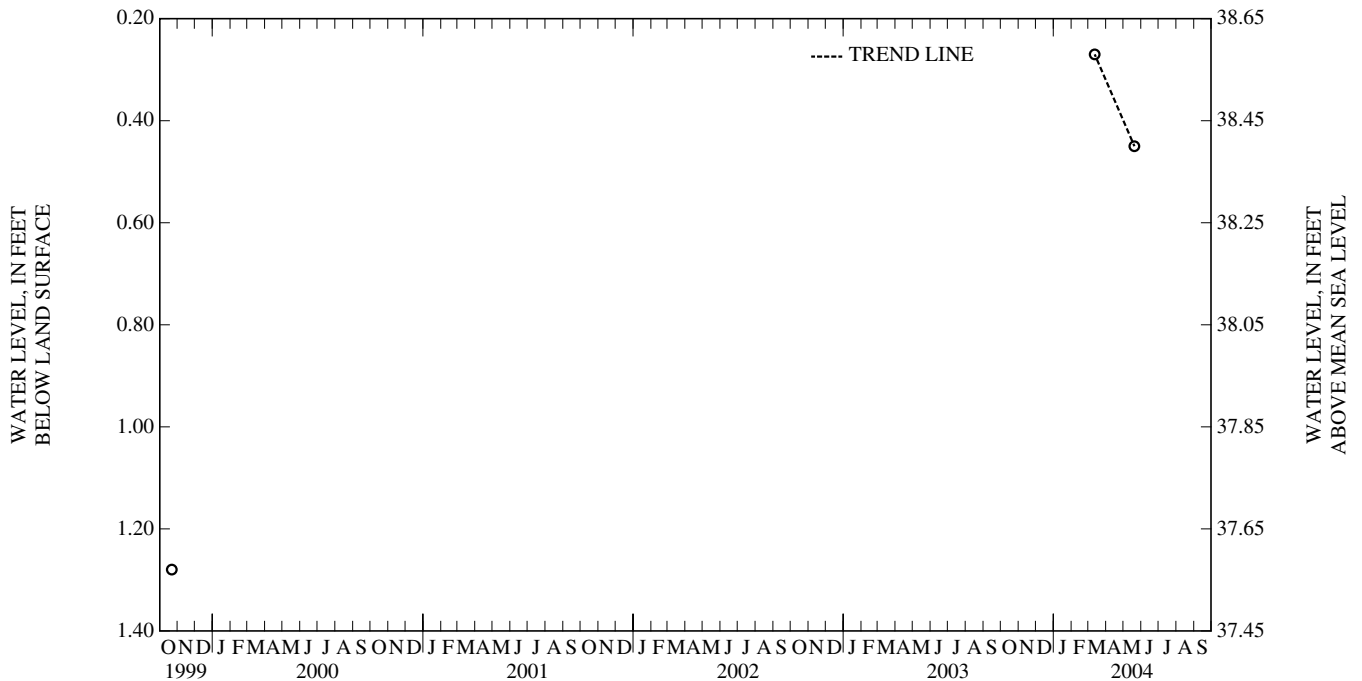
REMARKS.--NAWQA ACT study observation well.

PERIOD OF RECORD.--May 1998 to May 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.27 ft below land surface, March 12, 2004; lowest measured, 1.70 ft below land surface, August 25, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 12, 2004	.27	MAY 20, 2004	.45
HIGHEST	.27	MAR 12, 2004	
LOWEST	.45	MAY 20, 2004	



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Be 194. SITE ID.--391717075571001. PERMIT NUMBER.--KE-94-0254.

LOCATION.--Lat 39°17'17", long 75°57'10", Hydrologic Unit 02060002, 2.5 miles southeast on MD 298 from intersection of MD 298 and MD 213. Owner: U.S. Geological Survey.

AQUIFER.--Columbia Formation. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 31.0 ft; casing diameter 2 in., to 29.2 ft; screen diameter 2 in., from 29.2 to 31.0 ft.

INSTRUMENTATION.--Occasional measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 81.02 ft, surveyed, above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.57 ft below land surface.

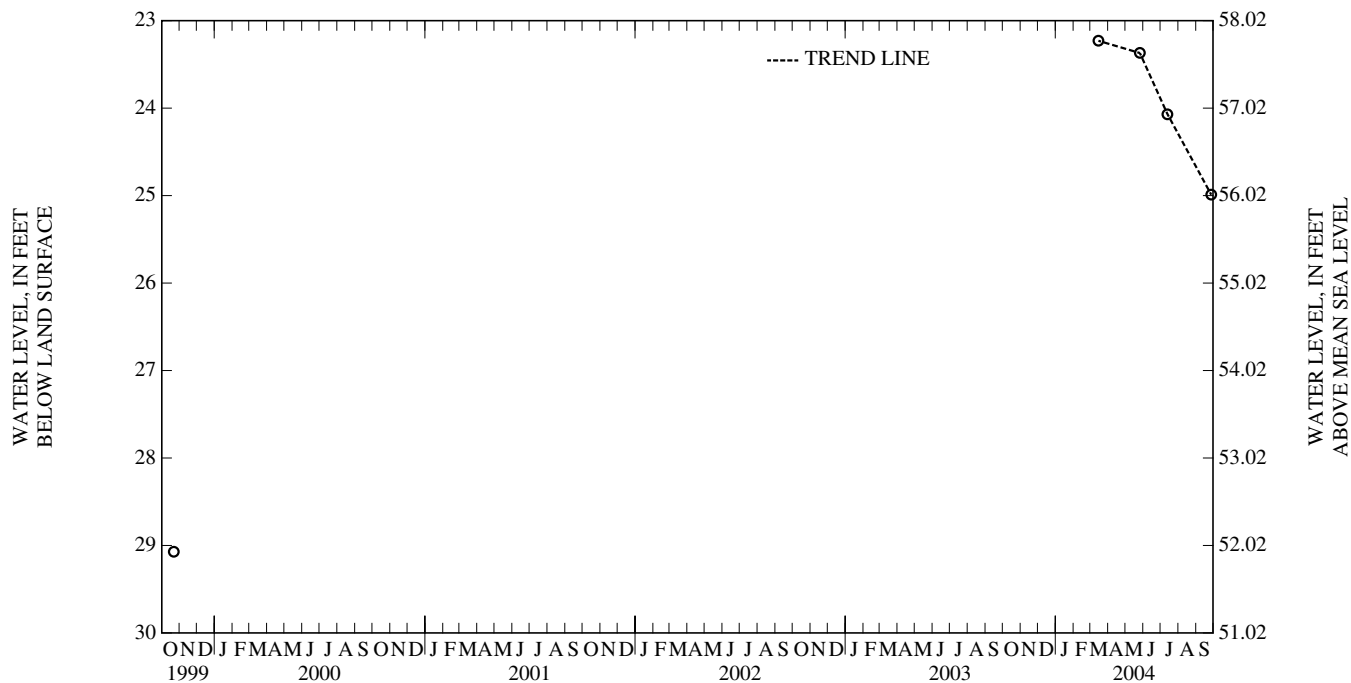
REMARKS.--NAWQA ACT study observation well.

PERIOD OF RECORD.--May 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.23 ft below land surface, March 15, 2004; lowest measured, 29.48 ft below land surface, September 23, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 15, 2004	23.23	MAY 26, 2004	23.37	JUL 13, 2004	24.07	SEP 27, 2004	24.99
HIGHEST 23.23 MAR 15, 2004							
LOWEST 29.48 SEP 23, 1999							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Be 195. SITE ID.--391717075571002. PERMIT NUMBER.--KE-94-0253.

LOCATION.--Lat 39°17'17", long 75°57'10", Hydrologic Unit 02060002, 2.5 miles southeast on MD 298 from intersection of MD 298 and MD 213. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 59.8 ft; casing diameter 2 in., to 57.0 ft; screen diameter 2 in., from 57.0 to 59.8 ft.

INSTRUMENTATION.--Occasional measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 81.02 ft, surveyed, above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.79 ft below land surface.

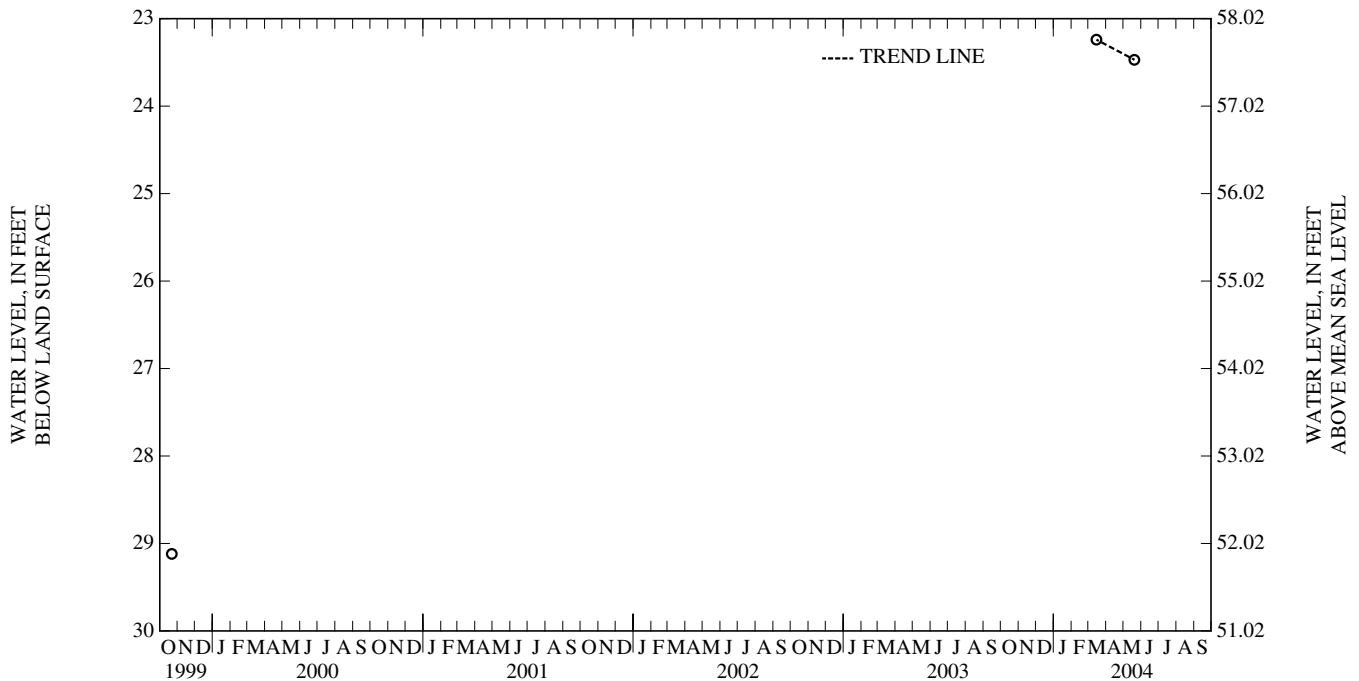
REMARKS.--NAWQA ACT study observation well.

PERIOD OF RECORD.--May 1998 to May 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.24 ft below land surface, March 15, 2004; lowest measured, 29.29 ft below land surface, August 25, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 15, 2004	23.24	MAY 20, 2004	23.47
HIGHEST	23.24	MAR 15, 2004	
LOWEST	29.29	AUG 25, 1999	



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Be 207. SITE ID.--391849075561601. PERMIT NUMBER.--KE-94-0257.

LOCATION.--Lat 39°18'49", long 75°56'16", Hydrologic Unit 02060002, 1.1 mile southeast on MD 444 from intersection of MD 298 and MD 444. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 45.0 ft; casing diameter 2 in., to 42.0 ft; screen diameter 2 in., from 42.0 to 45.0 ft.

INSTRUMENTATION.--Occasional measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 70.03 ft, surveyed, above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.35 ft below land surface.

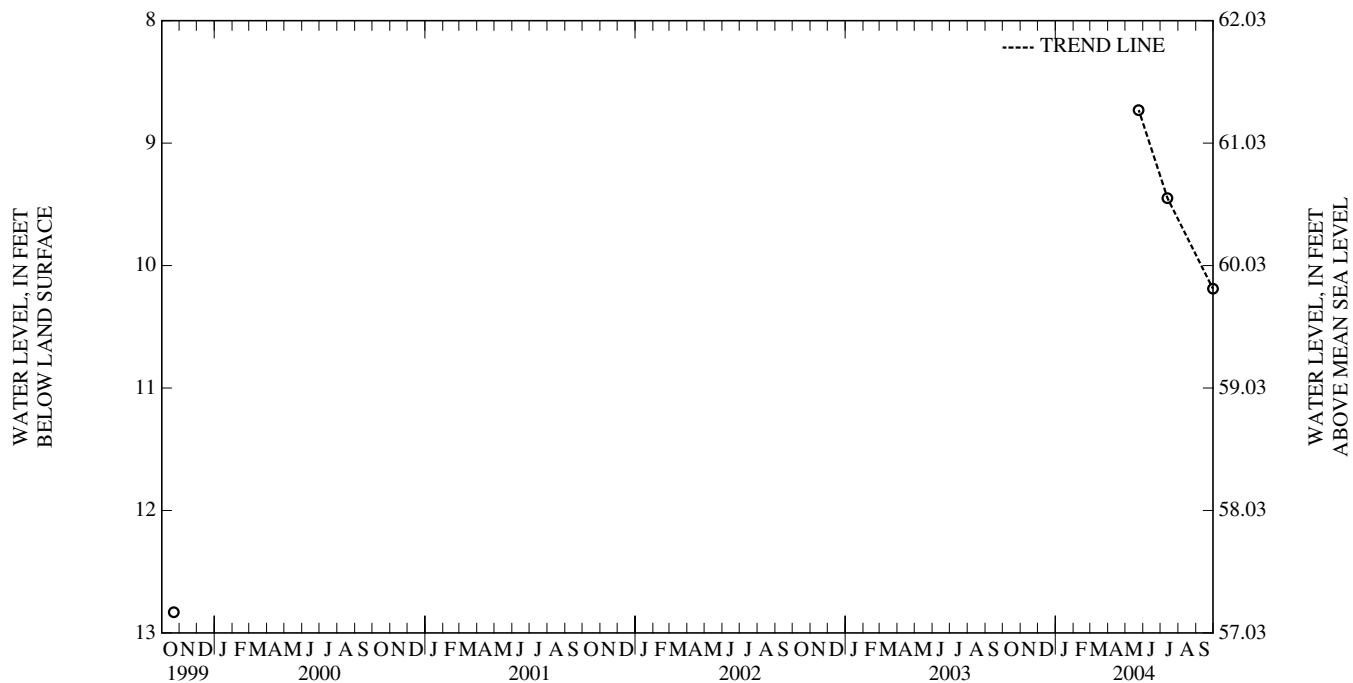
REMARKS.--NAWQA ACT study observation well.

PERIOD OF RECORD.--May 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.73 ft below land surface, May 24, 2004; lowest measured, 13.94 ft below land surface, August 25, 1999.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 24, 2004	8.73	JUL 13, 2004	9.45	SEP 30, 2004	10.19
HIGHEST	8.73	MAY 24, 2004			
LOWEST	10.19	SEP 30, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Be 218. SITE ID.--391710075584001. PERMIT NUMBER.--KE-94-1346.

LOCATION.--Lat 39°17'10", long 75°58'40", Hydrologic Unit 02060002, 1.6 miles southeast of Kennedyville on Kennedyville Road, opposite intersection with Comegeys Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 14.5 ft; casing diameter 2 in., to 11.5 ft; screen diameter 2 in., from 11.5 to 14.5 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 44.60 ft above North American Vertical Datum of 1988, estimated from LIDAR. Measuring point: Top of casing, 0.25 ft below land surface.

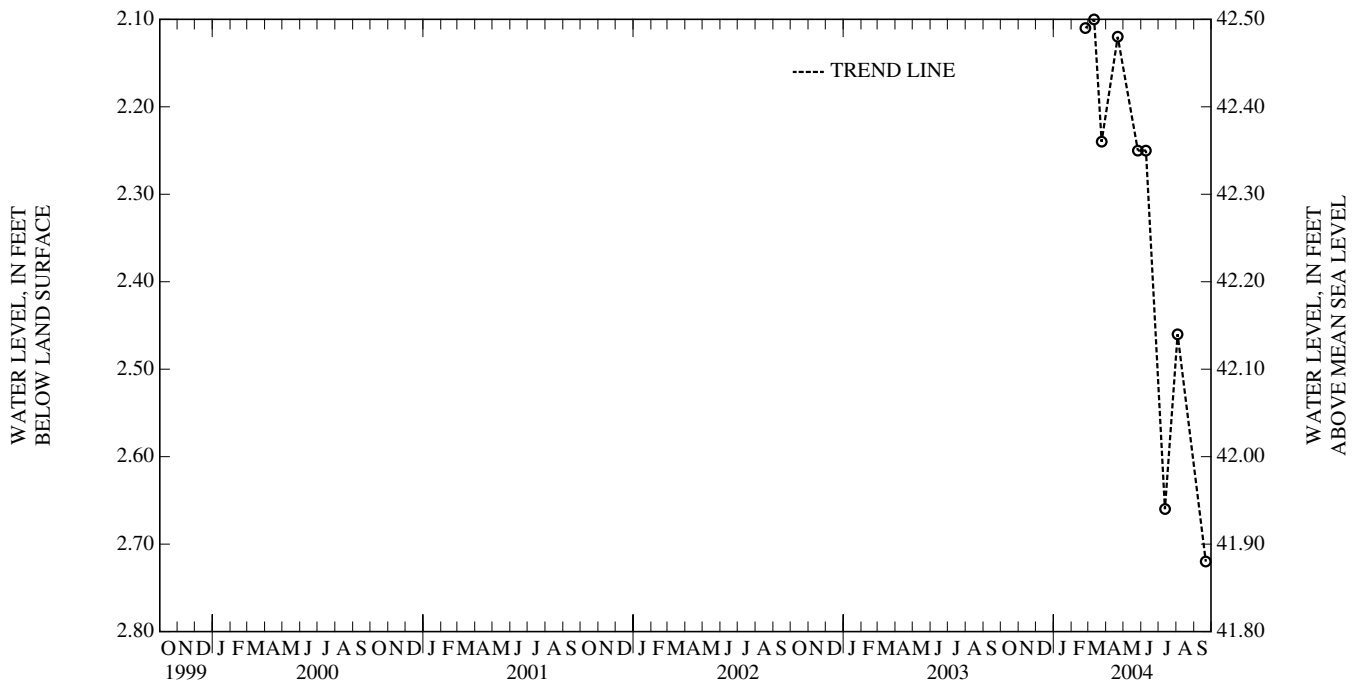
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-AS1-1A.

PERIOD OF RECORD.--February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.10 ft below land surface, March 11, 2004; lowest measured, 2.72 ft below land surface, September 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	2.11	APR 21, 2004	2.12	JUL 12, 2004	2.66
MAR 11	2.10	MAY 26	2.25	AUG 03	2.46
24	2.24	JUN 09	2.25	SEP 21	2.72
HIGHEST	2.10	MAR 11, 2004			
LOWEST	2.72	SEP 21, 2004			



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Be 219. SITE ID.--391710075584002. PERMIT NUMBER.--KE-94-1345.

LOCATION.--Lat 39°17'10", long 75°58'40", Hydrologic Unit 02060002, 1.6 miles southeast of Kennedyville on Kennedyville Road, opposite intersection with Comegeys Road. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 33.0 ft; casing diameter 2 in., to 30.0 ft; screen diameter 2 in., from 30.0 to 33.0 ft.

INSTRUMENTATION.--Twice monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 44.60 ft above North American Vertical Datum of 1988, estimated from LIDAR. Measuring point: Top of casing, 0.17 ft below land surface.

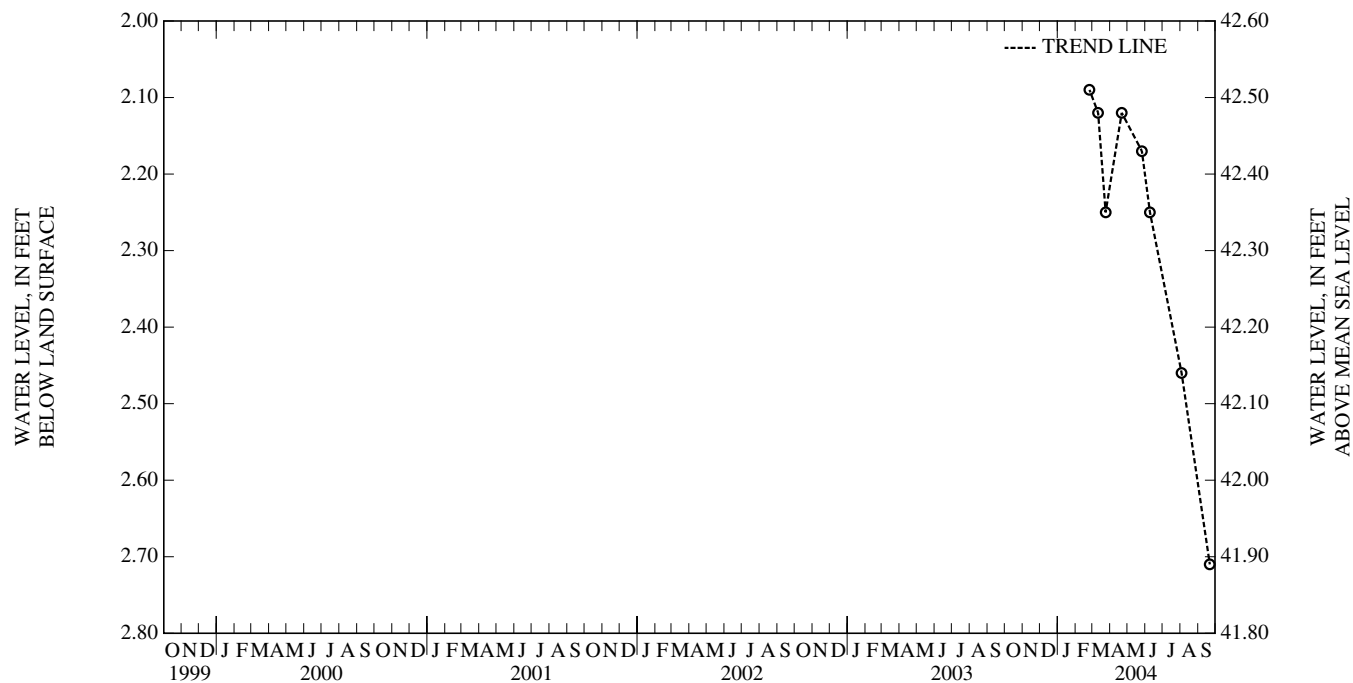
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-AS1-1B.

PERIOD OF RECORD.--February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.09 ft below land surface, February 25, 2004; lowest measured, 2.71 ft below land surface, September 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 2004	2.09	MAR 24, 2004	2.25	MAY 26, 2004	2.17	AUG 03, 2004	2.46
MAR 11	2.12	APR 21	2.12	JUN 09	2.25	SEP 21	2.71
HIGHEST 2.09 FEB 25, 2004							
LOWEST 2.71 SEP 21, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY--Continued

WELL NUMBER.--KE Bg 33. SITE ID.--391815075472101. PERMIT NUMBER.--KE-73-0670.

LOCATION.--Lat 39°18'15", long 75°47'21", Hydrologic Unit 02060002, 2 mi east of Massey, at Millington Wildlife Management Area. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 705 ft; casing diameter 4 in., to 695 ft; screen diameter 4 in., from 695 to 705 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1986 to April 1994.

DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.50 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

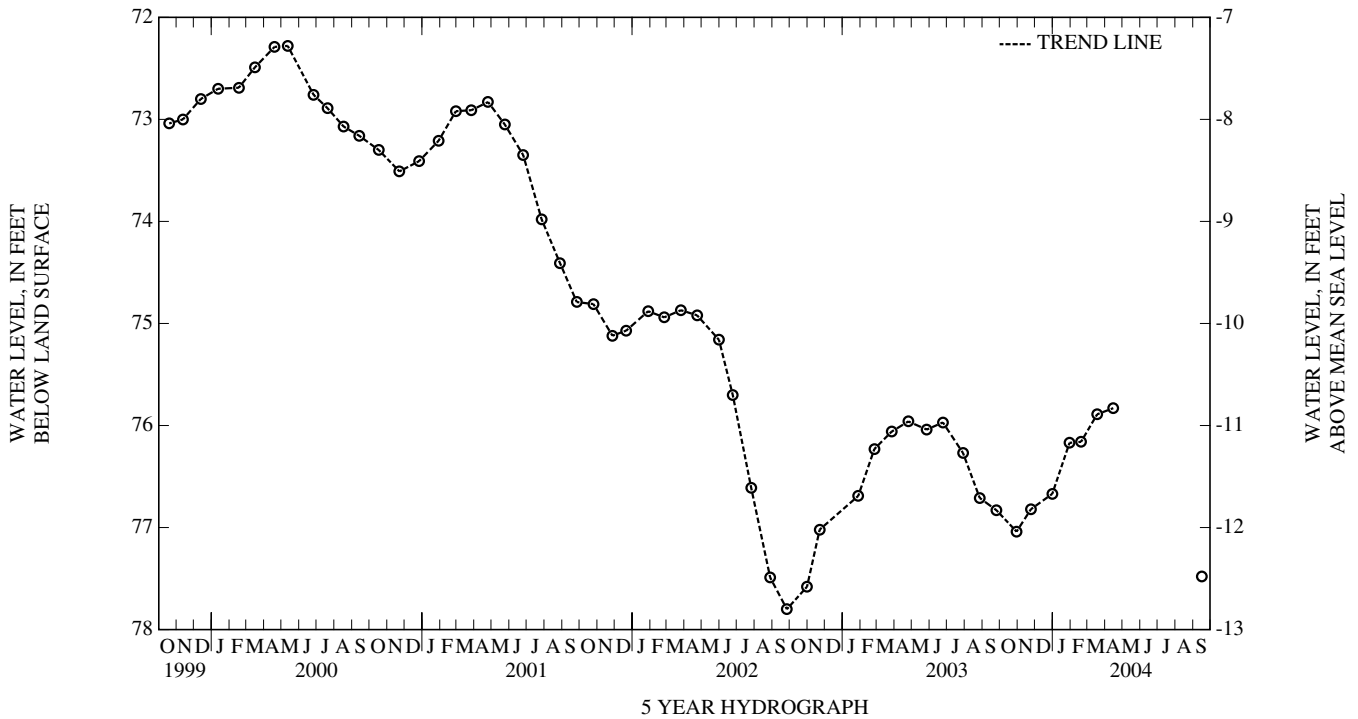
PERIOD OF RECORD.--March 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.62 ft below land surface, June 5, 1979; lowest measured, 77.80 ft below land surface, September 26, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	77.04	DEC 31, 2003	76.67	FEB 19, 2004	76.16	APR 15, 2004	75.83
NOV 24	76.82	JAN 30, 2004	76.17	MAR 18	75.89	SEP 16	77.48

HIGHEST 75.83 APR 15, 2004
 LOWEST 77.48 SEP 16, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Bg 34. SITE ID.--391815075472102. PERMIT NUMBER.--KE-73-0686.

LOCATION.--Lat 39°18'15", long 75°47'22", Hydrologic Unit 02060002, 2 mi east of Massey, at Millington Wildlife Management Area. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 186 ft; casing diameter 6 in., to 124 ft; screen diameter 6 in., from 124 to 186 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1986 to October 1994.

DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water-levels are affected by local and regional ground-water withdrawal.

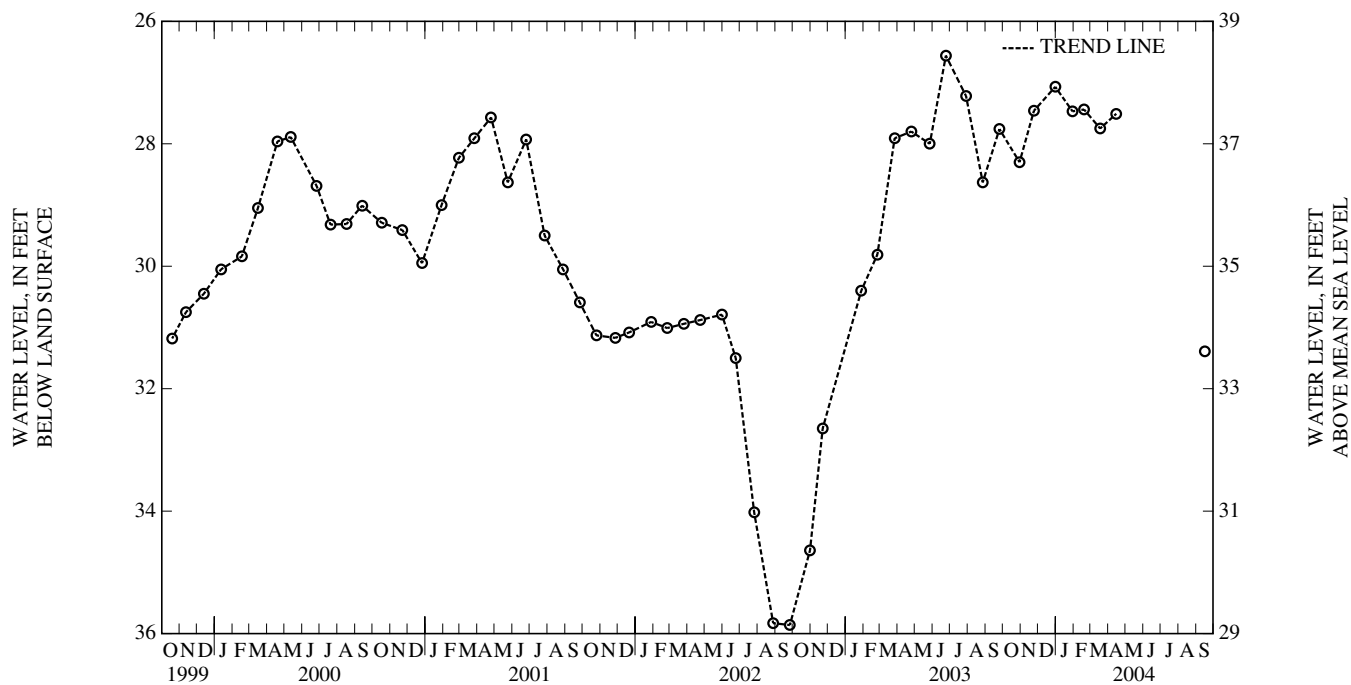
PERIOD OF RECORD.--April 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.37 ft below land surface, April 11, 1979; lowest measured, 36.23 ft below land surface, September 2, 1981.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	28.30	DEC 31, 2003	27.07	FEB 19, 2004	27.44	APR 15, 2004	27.51
NOV 24	27.46	JAN 30, 2004	27.47	MAR 18	27.75	SEP 16	31.39

HIGHEST 27.07 DEC 31, 2003
 LOWEST 31.39 SEP 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Cb 36. SITE ID.--391400076101401. PERMIT NUMBER.--KE-73-0660.

LOCATION.--Lat 39°14'00", long 76°10'14", Hydrologic Unit 02060002, 0.75 mi north of Fairlee. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 650 ft; casing diameter 10 in., to 114 ft; casing diameter 4 in., to 595 ft, and 605 to 650 ft; screen diameter 4 in., from 595 to 605 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Measured twice yearly from October 1986 to April 1991. Equipped with digital water-level recorder--30-minute recorder interval from July 1991 to October 1993. Measured twice yearly from October 1993 to January 2002. Monthly water level measurements from January 2003 to present.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 4.38 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

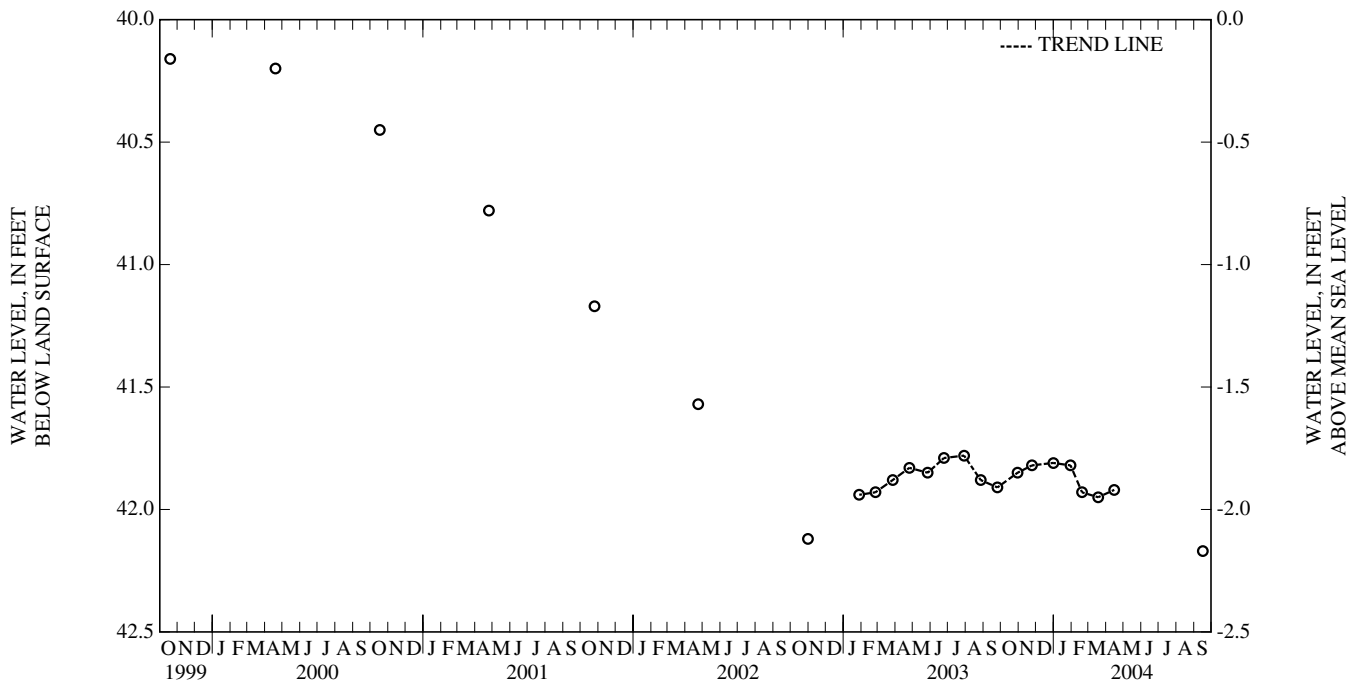
PERIOD OF RECORD.--June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.84 ft below land surface, September 15, 1982; lowest measured, 42.17 ft below land surface, September 16, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	41.85	DEC 31, 2003	41.81	FEB 19, 2004	41.93	APR 15, 2004	41.92
NOV 24	41.82	JAN 30, 2004	41.82	MAR 18	41.95	SEP 16	42.17

HIGHEST 41.81 DEC 31, 2003
 LOWEST 42.17 SEP 16, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Cb 97. SITE ID.--391124076101001. PERMIT NUMBER.--KE-88-0251.

LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corner, at Remington Farms. Owner: Maryland Geological Survey.

AQUIFER.--Magothy Formation of the Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 285 ft; casing diameter 4 in., to 270 ft; screen diameter 4 in., from 270 to 280 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 65.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.30 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

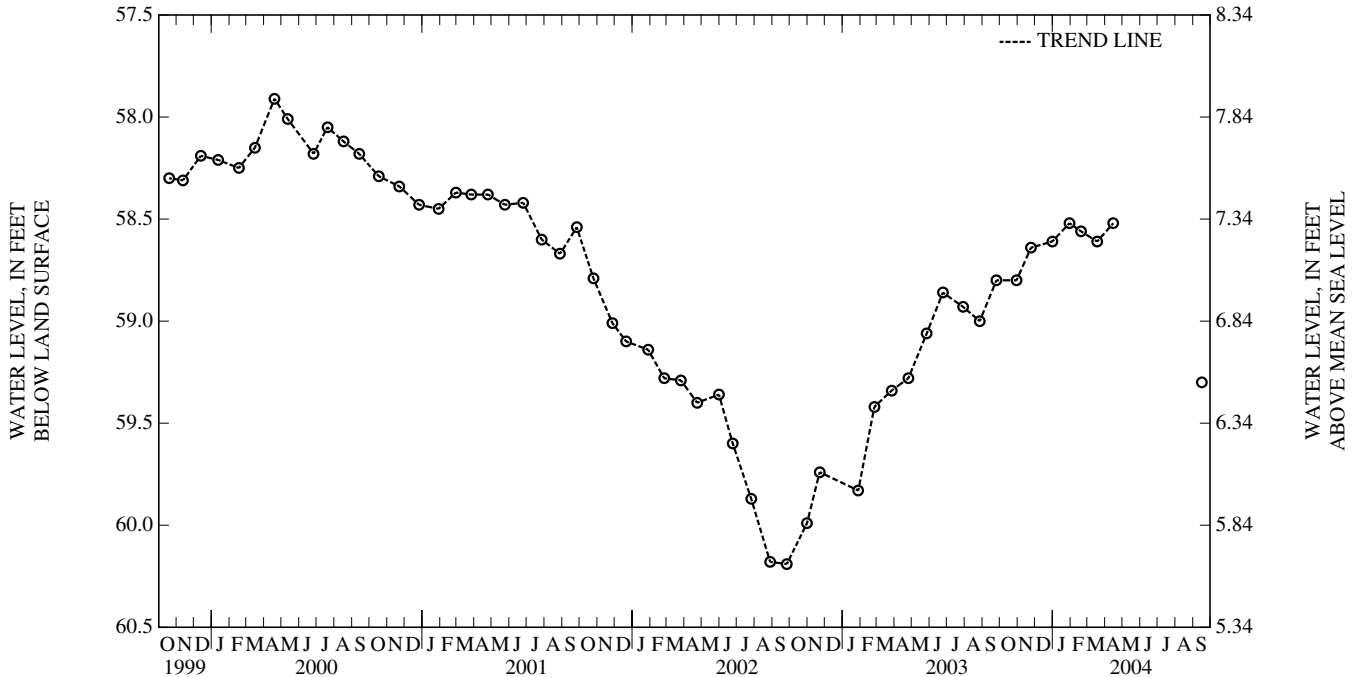
PERIOD OF RECORD.--October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.40 ft below land surface, October 24, 1991; lowest measured, 60.19 ft below land surface, September 26, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	58.80	DEC 31, 2003	58.61	FEB 19, 2004	58.56	APR 15, 2004	58.52
NOV 24	58.64	JAN 30, 2004	58.52	MAR 18	58.61	SEP 16	59.30

HIGHEST 58.52 JAN 30, 2004 APR 15, 2004
 LOWEST 59.30 SEP 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Cb 98. SITE ID.--391124076101002. PERMIT NUMBER.--KE-88-0254.

LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corner, at Remington Farms. Owner: Maryland Geological Survey.

AQUIFER.--Mount Laurel Formation (Monmouth aquifer) of Upper Cretaceous age. Aquifer code: 211MLRL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 225 ft; casing diameter 4 in., to 210 ft, and 220 to 225 ft; screen diameter 4 in., from 210 to 220 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 65.78 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.54 ft above land surface.

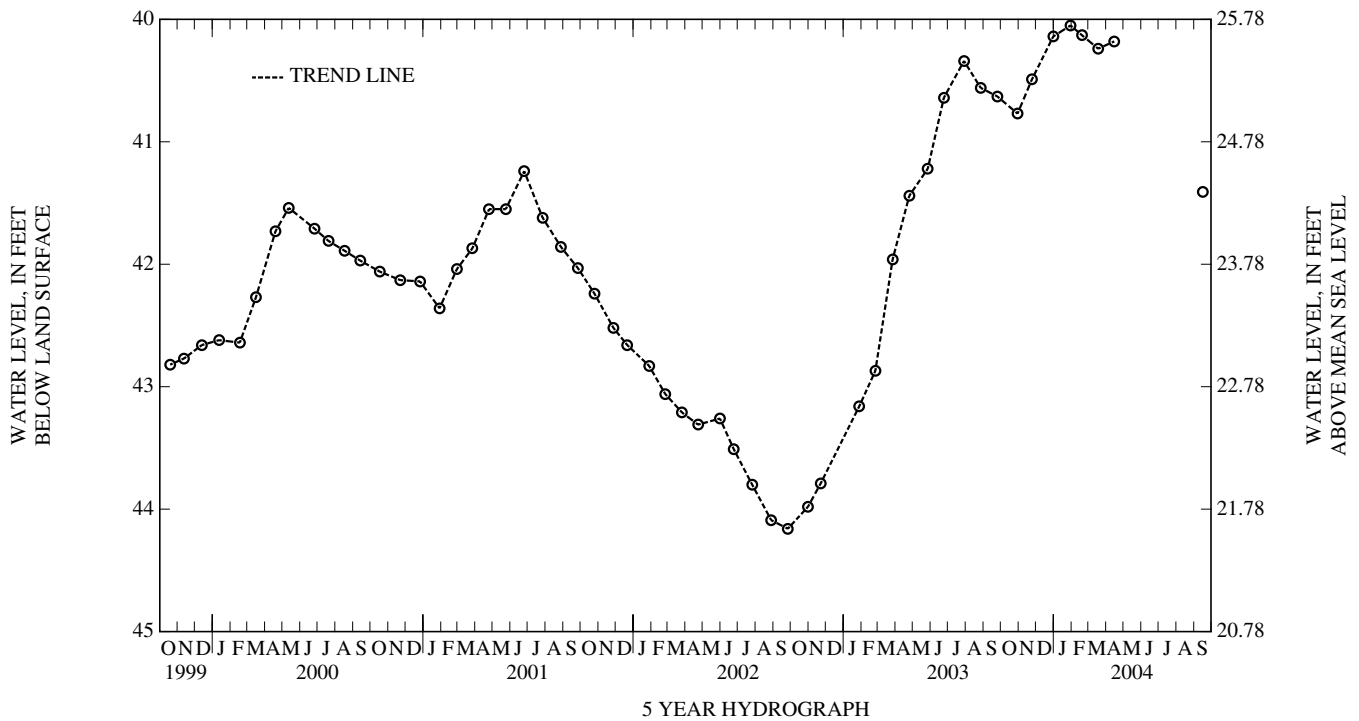
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.96 ft below land surface, April 15, 1997, and May 15, 1997; lowest measured, 44.23 ft below land surface, September 19, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	40.77	DEC 31, 2003	40.14	FEB 19, 2004	40.13	APR 15, 2004	40.18
NOV 24	40.49	JAN 30, 2004	40.05	MAR 18	40.24	SEP 16	41.41
HIGHEST 40.05 JAN 30, 2004							
LOWEST 41.41 SEP 16, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Cb 99. SITE ID.--391124076101003. PERMIT NUMBER.--KE-88-0252.

LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corner, at Remington Farms. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 134 ft; casing diameter 4 in., to 118 ft, and 128 to 134 ft; screen diameter 4 in., from 118 to 128 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 65.78 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.53 ft above land surface.

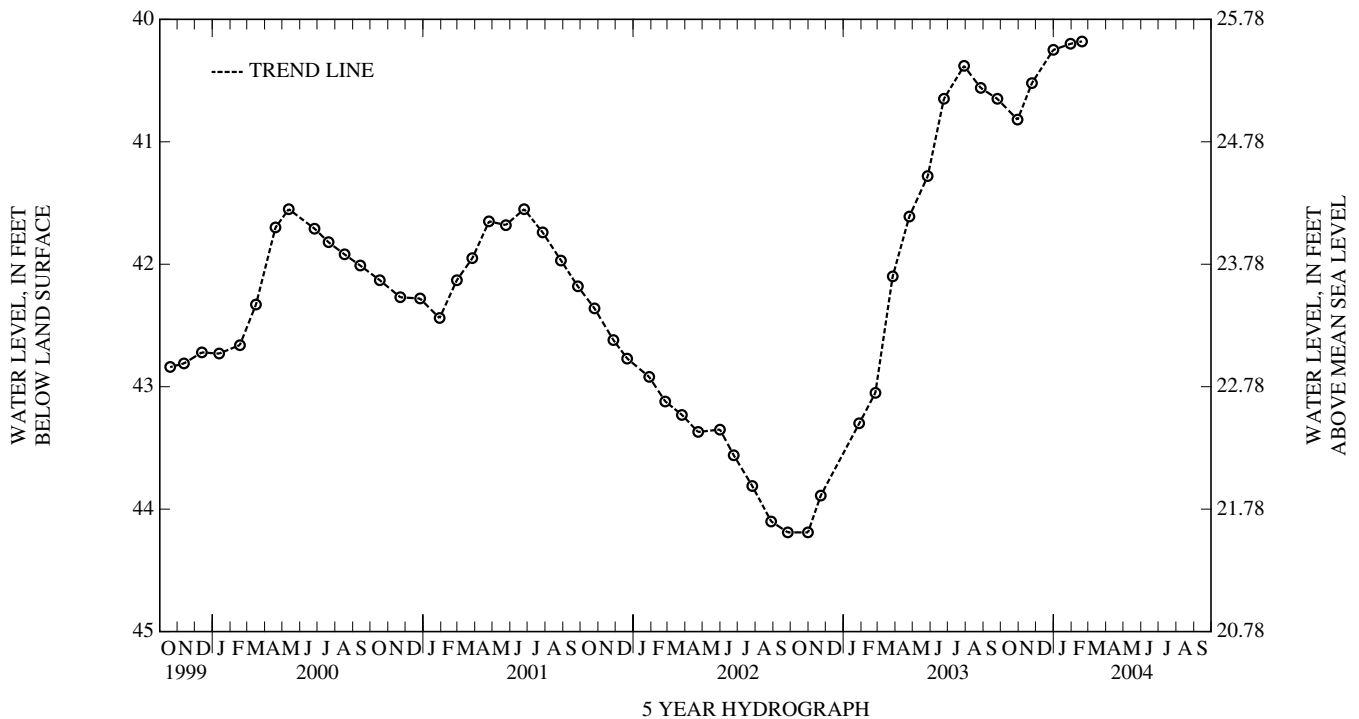
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1991 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.74 ft below land surface, May 15, 1997; lowest measured, 44.19 ft below land surface, September 26, 2002 and October 31, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	40.82	DEC 31, 2003	40.25	FEB 19, 2004	40.18
NOV 24	40.52	JAN 30, 2004	40.20		
HIGHEST 40.18 FEB 19, 2004					
LOWEST 40.82 OCT 30, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Cb 100. SITE ID.--391124076101004. PERMIT NUMBER.--KE-88-0253.

LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corners, at Remington Farms. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 67 ft; casing diameter 4 in., to 52 ft, and 62 to 67 ft; screen diameter 4 in., from 52 to 62 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1993 to October 1999. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 65.69 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.56 ft above land surface.

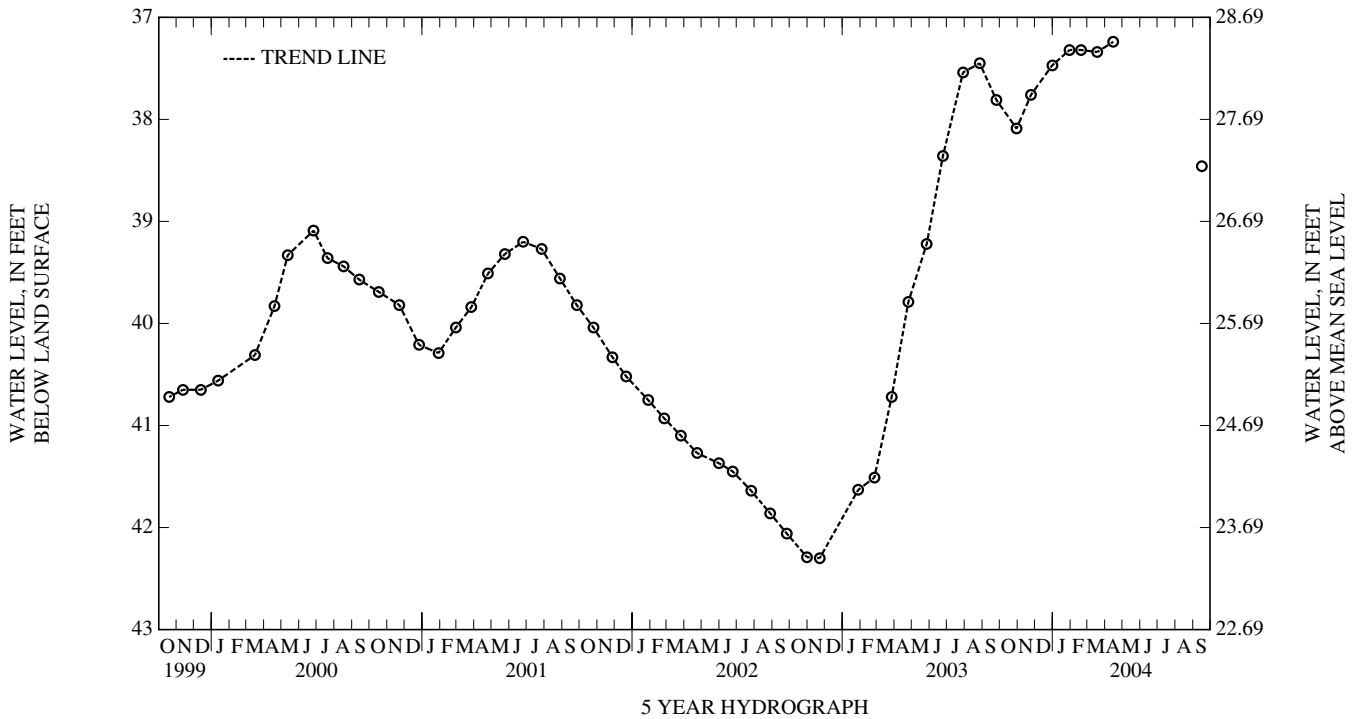
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.63 ft below land surface, April 15, 1997; lowest measured, 42.30 ft below land surface, November 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	38.09	DEC 31, 2003	37.47	FEB 19, 2004	37.32	APR 15, 2004	37.24
NOV 24	37.76	JAN 30, 2004	37.32	MAR 18	37.34	SEP 16	38.46
HIGHEST 37.24 APR 15, 2004							
LOWEST 38.46 SEP 16, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Cb 101. SITE ID.--391251076142201. PERMIT NUMBER.--KE-88-0250.

LOCATION.--Lat 39°12'48", long 76°14'22", Hydrologic Unit 02060002, 0.4 mi east of Tolchester Beach, south of MD Rt. 21. Owner: Maryland Geological Survey.

AQUIFER.--Kent Island Formation (Columbia aquifer) of Pleistocene age. Aquifer code: 112KILD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 73 ft; casing diameter 4 in., to 58 ft, and 68 to 73 ft; screen diameter 4 in., from 58 to 68 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1995 to February 2001. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 31.12 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.60 ft above land surface.

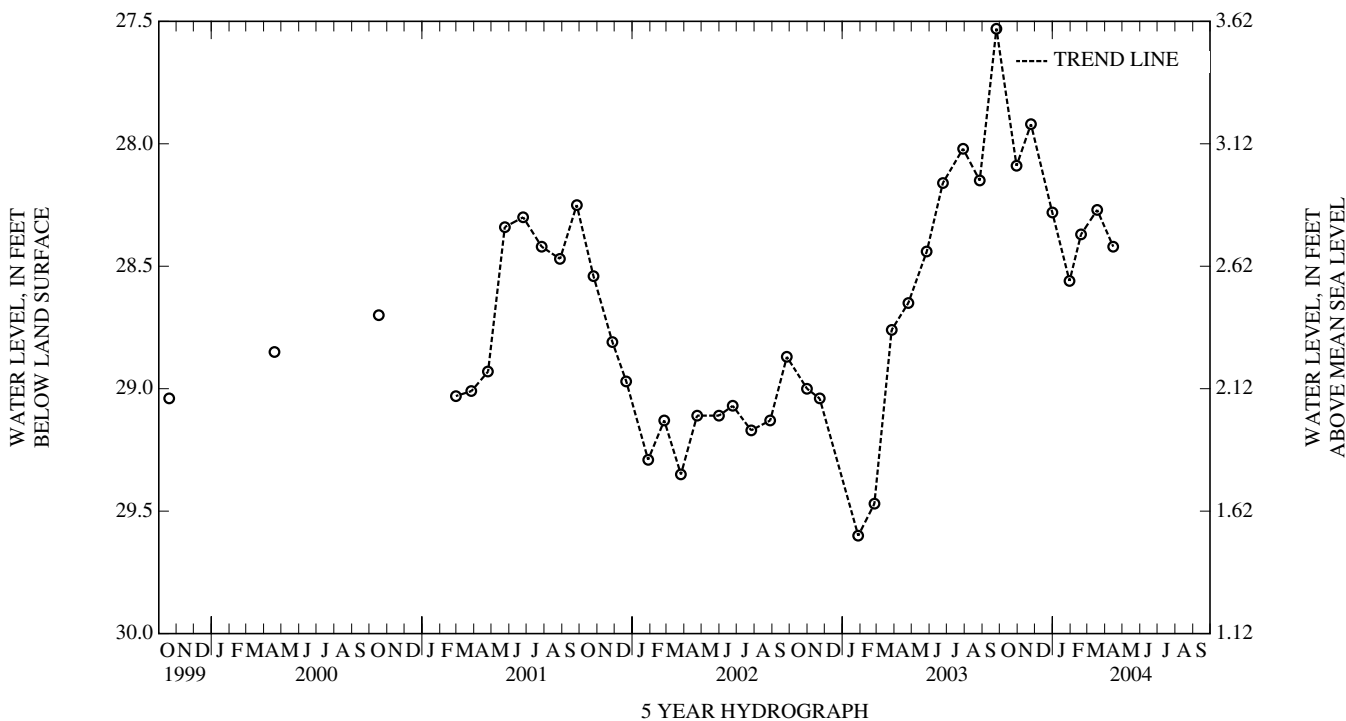
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1991 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.53 ft below land surface, September 25, 2003; lowest measured, 29.60 ft below land surface, January 28, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	28.09	DEC 31, 2003	28.28	FEB 19, 2004	28.37	APR 15, 2004	28.42
NOV 24	27.92	JAN 30, 2004	28.56	MAR 18	28.27		
HIGHEST 27.92 NOV 24, 2003							
LOWEST 28.56 JAN 30, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Cb 103. SITE ID.--391124076101005. PERMIT NUMBER.--KE-88-0288.

LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corner, at Remington Farms. Owner: Maryland Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 404 ft; casing diameter 4 in., to 389 ft, and 399 to 404 ft; screen diameter 4 in., from 389 to 399 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 65.60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.54 ft above land surface.

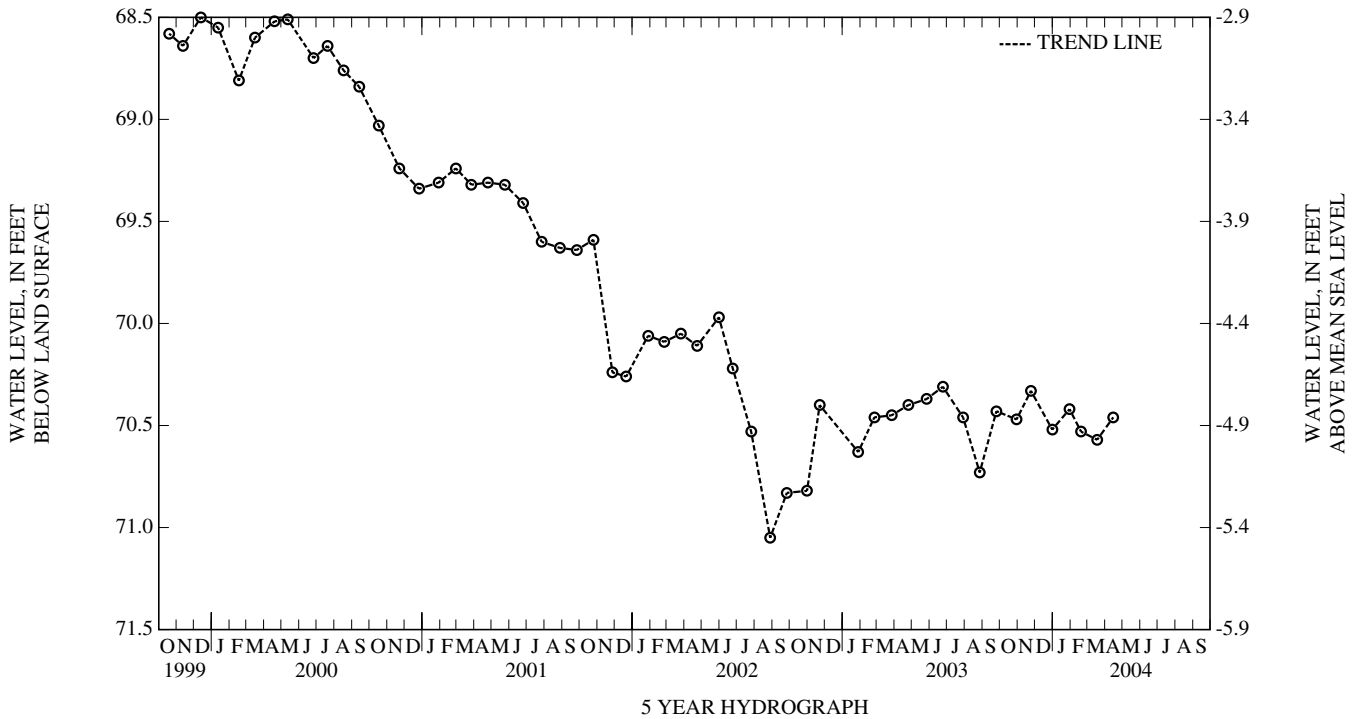
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--February 1992 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.64 ft below land surface, April 2, 1992; lowest measured, 71.05 ft below land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	70.47	DEC 31, 2003	70.52	FEB 19, 2004	70.53	APR 15, 2004	70.46
NOV 24	70.33	JAN 30, 2004	70.42	MAR 18	70.57		
HIGHEST 70.33 NOV 24, 2003							
LOWEST 70.57 MAR 18, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY--Continued

WELL NUMBER.--KE Cd 44. SITE ID.--391432076015501. PERMIT NUMBER.--KE-03-6139.

LOCATION.--Lat 39°14'32", long 76°01'55", Hydrologic Unit 02060002, MD Rt. 291, 2.6 mi northeast of Chestertown. Owner: Chestertown Foods.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 84 ft; casing diameter 4 in., to 79 ft; screen diameter 5 in., from 79 to 84 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.20 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels measured by plant personnel with an electric tape, September 18, 1959 to April 18, 1963. Food processing plant closed from August 31, 1995 to September 30, 1996. Water levels are affected by local and regional ground-water withdrawal.

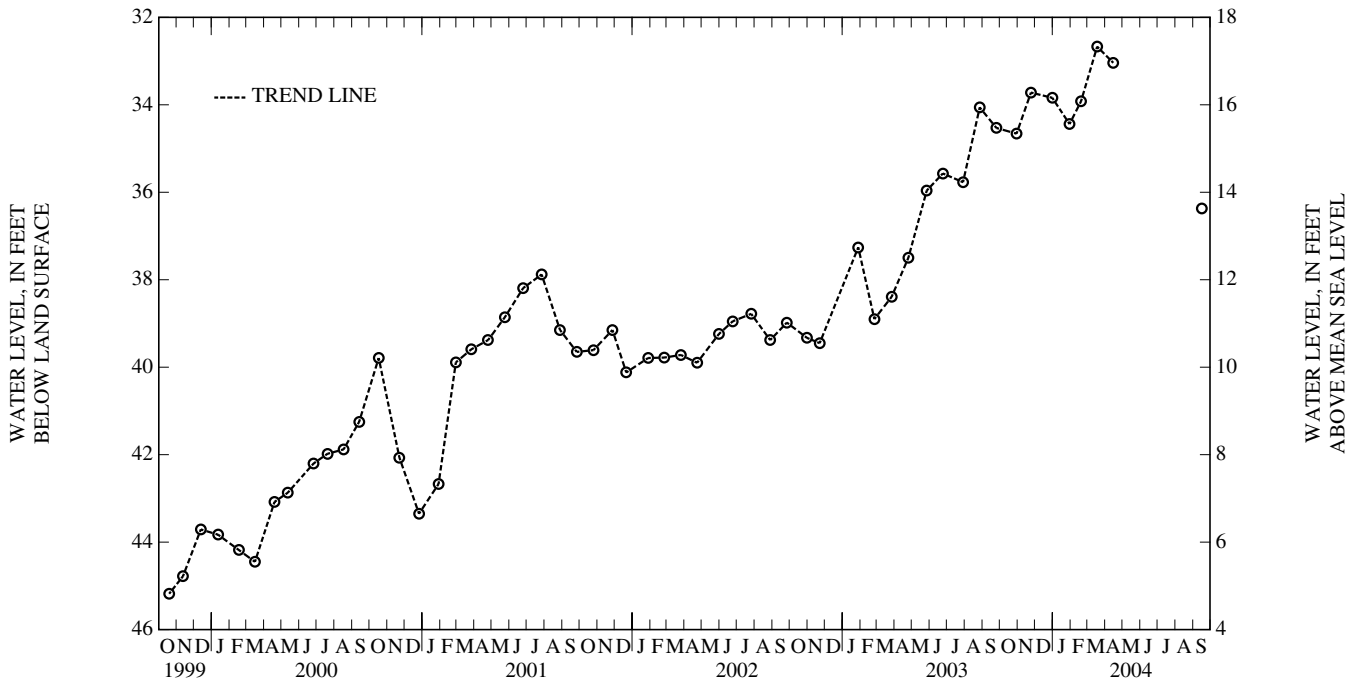
PERIOD OF RECORD.--July 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.92 ft below land surface, September 6, 1996; lowest measured, 54.46 ft below land surface, August 4, 1966.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	34.66	DEC 31, 2003	33.84	FEB 19, 2004	33.92	APR 15, 2004	33.04
NOV 24	33.72	JAN 30, 2004	34.44	MAR 18	32.67	SEP 16	36.37

HIGHEST 32.67 MAR 18, 2004
 LOWEST 36.37 SEP 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Db 40. SITE ID.--390837076140401. PERMIT NUMBER.--KE-73-0805.

LOCATION.--Lat 39°08'37", long 76°14'04", Hydrologic Unit 02070002, near Rock Hall. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,030 ft; casing diameter 4 in., to 1,019 ft; screen diameter 4 in., from 1,019 to 1,030 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly measurements prior to January 2003.

DATUM.--Elevation of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.65 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

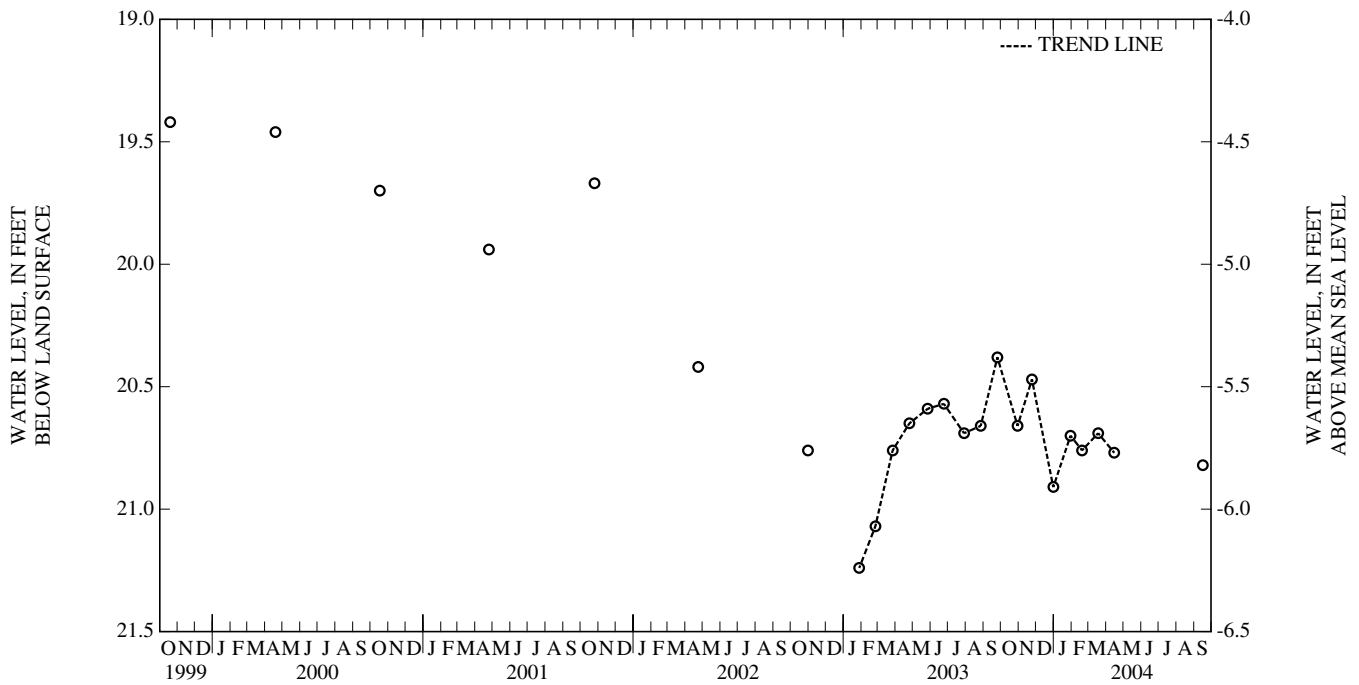
PERIOD OF RECORD.--December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.08 ft below land surface, October 30, 1980; lowest measured, 21.24 ft below land surface, January 28, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	20.66	DEC 31, 2003	20.91	FEB 19, 2004	20.76	APR 15, 2004	20.77
NOV 24	20.47	JAN 30, 2004	20.70	MAR 18	20.69	SEP 16	20.82

HIGHEST 20.47 NOV 24, 2003
 LOWEST 20.91 DEC 31, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY--Continued

WELL NUMBER.--KE Dc 89. SITE ID.--390626076083301. PERMIT NUMBER.--KE-88-0246.

LOCATION.--Lat 39°06'26", long 76°08'33", Hydrologic Unit 02060002, at the end of Cliffs City Rd. Owner: Maryland Geological Survey.

AQUIFER.--Kent Island Formation (Columbia aquifer) of Pleistocene age. Aquifer code: 112KILD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 29 ft; casing diameter 4 in., to 14 ft, and 24 to 29 ft; screen diameter 4 in., from 14 to 24 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 4.52 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.44 ft above land surface.

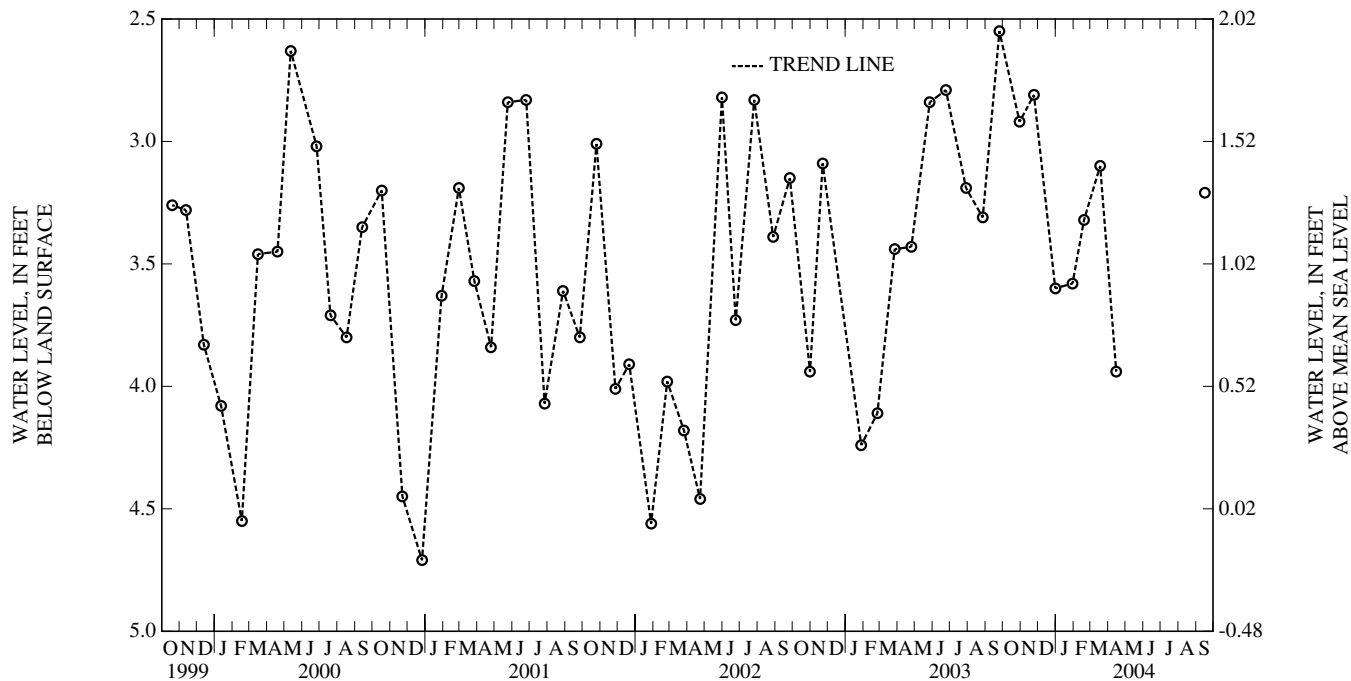
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.40 ft below land surface, October 21, 1996; lowest measured, 5.14 ft below land surface, January 20, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	2.92	DEC 31, 2003	3.60	FEB 19, 2004	3.32	APR 15, 2004	3.94
NOV 24	2.81	JAN 30, 2004	3.58	MAR 18	3.10	SEP 16	3.21
HIGHEST 2.81 NOV 24, 2003							
LOWEST 3.94 APR 15, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

KENT COUNTY—Continued

WELL NUMBER.--KE Dc 91. SITE ID.--390626076083302. PERMIT NUMBER.--KE-88-0247.

LOCATION.--Lat 39°06'26", long 76°08'33", Hydrologic Unit 02060002, 1.0 mi south of Cliffs City, at Cliffs Wharf. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 155 ft; casing diameter 4 in., to 140 ft, and 150 to 155 ft; screen diameter 4 in., from 140 to 150 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 4.64 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.46 ft above land surface.

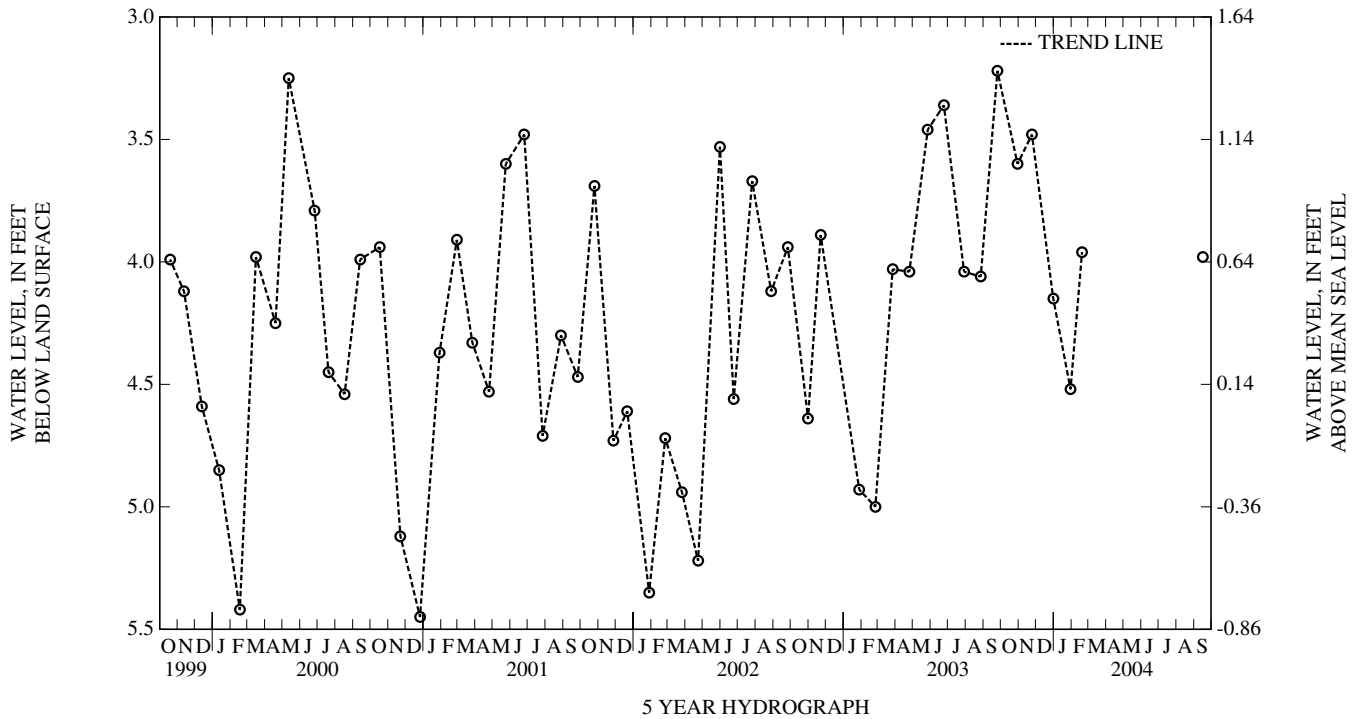
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.01 ft below land surface, October 21, 1996; lowest measured, 5.81 ft below land surface, December 13, 1994.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	3.60	DEC 31, 2003	4.15	FEB 19, 2004	3.96
NOV 24	3.48	JAN 30, 2004	4.52	SEP 16	3.98
HIGHEST 3.48 NOV 24, 2003					
LOWEST 4.52 JAN 30, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

MONTGOMERY COUNTY

WELL NUMBER.--MO Cb 26. SITE ID.--391142077280601. PERMIT NUMBER.--MO-72-0191.

LOCATION.--Lat 39°11'42", long 77°28'06", Hydrologic Unit 02070008, 2 mi southwest of Dickerson, at Dickerson Regional Park. Owner: U.S. Geological Survey.

AQUIFER.--Manassas Sandstone, Poolsville Member of Upper Triassic age. Aquifer code: 231MNSS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 885 ft; casing diameter 6 in., to 38 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 220 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 8.60 ft above land surface.

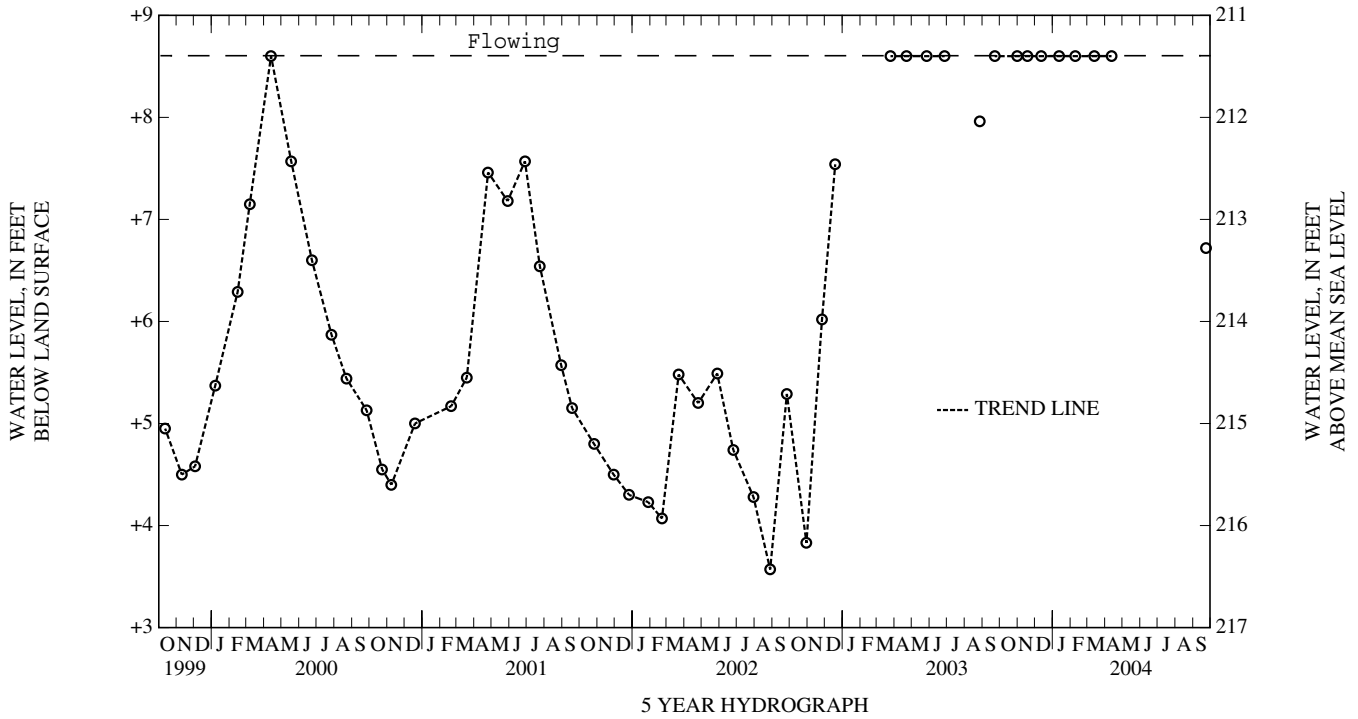
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--February 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, flowing on January 3, 1991, April 3, 1991, April 5, 1993, May 3, 1993, March 7, 1994, April 5, 1994, May 10, 1994, January 29, 1996, February 15, 1996, March 12, 1996, April 11, 1996, May 6, 1996, June 5, 1996, July 2, 1996, August 1, 1996, October 10, 1996, November 4, 1996, December 3, 1996, January 2, 1997, February 3, 1997, March 13, 1997, April 10, 1997, February 3, 1998, March 2, 1998, April 2, 1998, May 11, 1998, April 13, 2000, October 31, 2003, November 18, 2003, December 12, 2003, January 12, 2004, February 9, 2004, March 13, 2004, April 12, 2004, March 25, 2003, April 22, 2003, May 27, 2003, June 27, 2003, September 22, 2003, October 31, 2003, November 18, 2003, December 12, 2003, January 12, 2004, February 9, 2004, March 13, 2004, April 12, 2004; lowest measured, 3.57 ft above land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	Flowing	DEC 12, 2003	Flowing	FEB 09, 2004	Flowing	APR 12, 2004	Flowing
NOV 18	Flowing	JAN 12, 2004	Flowing	MAR 13	Flowing	SEP 23	+6.72
HIGHEST	Flowing	LOWEST	+6.72				
		SEP 23, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

MONTGOMERY COUNTY—Continued

WELL NUMBER.--MO Cc 14. SITE ID.--391314077224201.

LOCATION.--Lat 39°13'14", long 77°22'42", Hydrologic Unit 02070008, at Barnesville. Owner: Private owner.

AQUIFER.--Ijamsville Formation of Paleozoic age. Aquifer code: 300IJMV.

WELL CHARACTERISTICS.--Dug, stone-lined, unused, water-table well, depth 46 ft; casing diameter 60 in.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 560 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of wooden well cover, 3.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

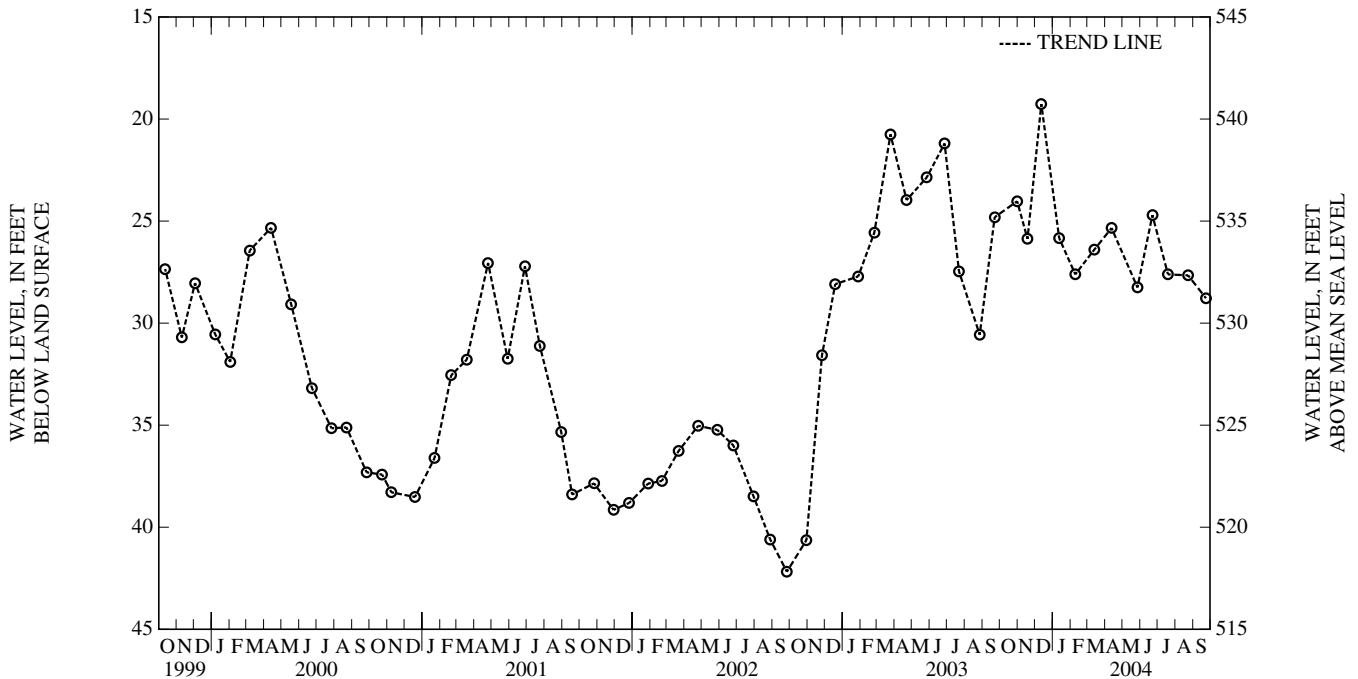
PERIOD OF RECORD.--November 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.00 ft below land surface, April 5, 1993; lowest measured, dry, on December 2, 1957, December 7, 1964, December 6, 1965, January 3, 1966, February 2, 1966.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	24.03	JAN 12, 2004	25.83	APR 12, 2004	25.34	JUL 19, 2004	27.61
NOV 18	25.87	FEB 09	27.61	MAY 27	28.25	AUG 23	27.66
DEC 12	19.27	MAR 13	26.40	JUN 22	24.71	SEP 23	28.78

HIGHEST 19.27 DEC 12, 2003
 LOWEST 28.78 SEP 23, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

MONTGOMERY COUNTRY --Continued

WELL NUMBER.--MO Db 68. SITE ID.--390802077283801. PERMIT NUMBER.--MO-73-1869.

LOCATION.--Lat 39°08'02", long 77°28'38", Hydrologic Unit 0207008, south of Club Hollow Road, at the National Institutes of Health, Animal Center.
Owner: U.S. Geological Survey.

AQUIFER.--Balls Bluff Siltstone of Upper Triassic age. Aquifer code: 231BLBF.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 250 ft; casing diameter 6 in., to 40 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from December 1998 to April 2004.

DATUM.--Elevation of land surface is 260 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 2.02 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--May 1978 to August 1980, June 1985 to April 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.12 ft below land surface, May 12, 1989; lowest measured, 41.76 ft below land surface, September 9, 1999 (recorder).

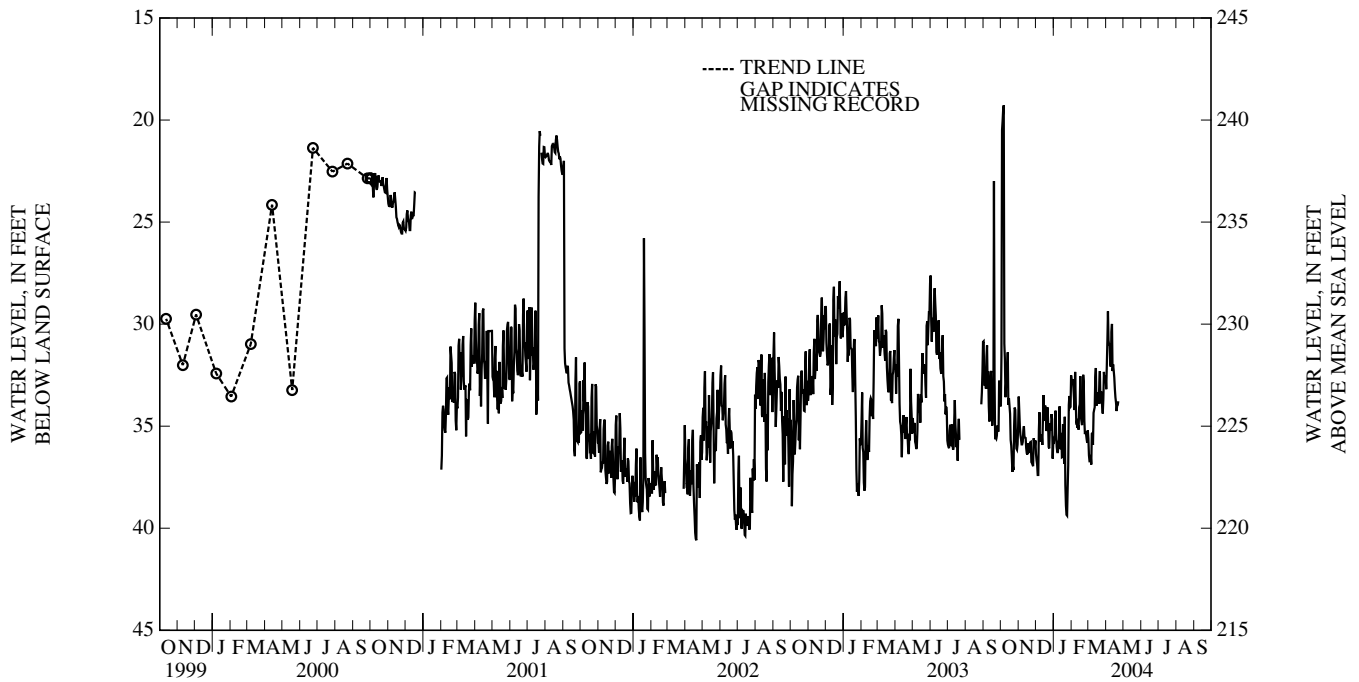
WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	34.78	DEC 12, 2003	35.45	FEB 09, 2004	33.12
NOV 18	36.17	JAN 12, 2004	34.29	MAR 13	33.03
HIGHEST	33.03	MAR 13, 2004			
LOWEST	36.17	NOV 18, 2003			

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	34.03	22.31	33.55	23.20	36.35	26.97	35.87	26.33	32.80	23.56	35.61	26.94
2	31.57	20.50	34.25	22.91	36.67	25.97	35.57	25.60	32.84	23.00	36.43	35.61
3	20.50	20.05	35.04	25.90	36.87	26.50	35.45	25.44	32.70	22.68	36.72	36.43
4	20.05	19.08	35.43	26.41	37.39	28.32	34.24	25.00	33.12	22.72	36.72	28.30
5	19.47	18.64	35.63	27.22	37.39	26.51	35.33	24.90	33.62	23.26	36.41	27.91
6	19.28	18.30	35.89	35.46	35.20	25.43	36.02	35.33	34.21	24.34	36.88	28.07
7	30.96	19.28	35.89	25.82	34.32	25.12	36.27	35.98	32.34	23.33	35.37	25.56
8	31.71	21.17	35.77	26.07	35.76	25.02	36.27	26.16	33.72	23.38	35.34	25.59
9	33.58	22.23	35.21	24.56	35.65	25.02	35.82	25.20	34.80	24.60	35.92	24.70
10	32.97	22.85	35.00	24.28	35.63	24.33	35.65	24.57	34.76	23.97	34.35	23.57
11	32.31	22.98	35.52	25.80	35.41	25.99	34.03	24.34	35.08	25.19	34.20	22.74
12	32.22	22.35	35.56	33.60	35.92	26.39	35.40	24.73	34.95	26.25	34.07	23.26
13	31.38	22.21	35.58	25.86	34.71	23.87	36.13	26.49	35.17	25.34	32.60	23.19
14	33.95	22.46	36.08	35.57	33.48	23.73	35.33	25.49	34.07	24.64	32.15	22.30
15	33.63	22.70	36.33	36.08	34.74	23.71	36.52	27.29	33.93	23.87	34.00	22.27
16	34.01	22.73	36.39	26.57	34.27	24.05	36.50	26.40	32.55	23.67	33.63	22.30
17	34.39	22.51	35.83	27.06	33.99	23.63	34.90	25.71	34.54	23.63	33.34	22.34
18	35.67	26.11	36.28	35.83	34.29	23.20	36.11	26.48	34.77	24.50	33.44	22.09
19	35.95	26.31	36.27	35.90	35.24	24.47	36.84	22.21	34.95	24.15	33.90	22.90
20	36.49	35.20	35.90	35.75	34.85	24.10	34.54	21.40	34.04	23.20	32.89	22.83
21	37.24	27.36	35.79	35.63	34.08	23.82	37.87	34.54	32.48	21.98	32.30	22.21
22	36.98	32.64	35.77	23.66	34.69	23.60	38.88	37.87	32.85	21.98	33.88	23.04
23	37.15	25.16	36.76	34.46	36.02	26.64	39.34	38.88	34.74	23.84	33.29	21.86
24	35.00	24.71	36.81	26.68	36.09	26.37	39.38	29.51	35.39	25.24	33.70	22.74
25	34.09	23.92	36.89	27.35	35.15	25.65	38.02	29.24	35.25	24.86	34.03	22.36
26	34.20	24.10	36.96	27.33	34.86	24.84	36.92	24.93	35.39	26.57	34.38	24.12
27	35.36	24.42	35.59	26.38	35.22	25.39	33.96	24.63	35.64	26.58	33.67	23.52
28	36.09	35.36	35.81	24.53	34.41	24.60	33.52	23.75	35.82	26.08	32.34	22.13
29	36.15	26.33	36.02	27.29	34.66	24.95	34.09	23.79	35.20	25.78	32.81	21.63
30	35.90	25.79	35.70	26.88	36.59	26.93	34.05	23.86	---	---	32.63	21.11
31	35.03	24.16	---	---	35.78	33.81	32.51	23.45	---	---	32.53	21.00
MONTH	37.24	18.30	36.96	22.91	37.39	23.20	39.38	21.40	35.82	21.98	36.88	21.00

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	33.19	22.03	---	---	---	---	---	---	---	---	---	---
2	32.04	20.72	---	---	---	---	---	---	---	---	---	---
3	30.86	20.23	---	---	---	---	---	---	---	---	---	---
4	29.37	19.47	---	---	---	---	---	---	---	---	---	---
5	30.78	19.14	---	---	---	---	---	---	---	---	---	---
6	31.04	19.78	---	---	---	---	---	---	---	---	---	---
7	30.95	20.21	---	---	---	---	---	---	---	---	---	---
8	31.98	20.78	---	---	---	---	---	---	---	---	---	---
9	32.09	20.80	---	---	---	---	---	---	---	---	---	---
10	30.39	20.52	---	---	---	---	---	---	---	---	---	---
11	29.99	20.01	---	---	---	---	---	---	---	---	---	---
12	32.30	19.56	---	---	---	---	---	---	---	---	---	---
13	31.97	20.37	---	---	---	---	---	---	---	---	---	---
14	32.28	21.32	---	---	---	---	---	---	---	---	---	---
15	32.61	21.85	---	---	---	---	---	---	---	---	---	---
16	33.18	21.68	---	---	---	---	---	---	---	---	---	---
17	33.59	23.39	---	---	---	---	---	---	---	---	---	---
18	33.84	23.73	---	---	---	---	---	---	---	---	---	---
19	34.26	25.43	---	---	---	---	---	---	---	---	---	---
20	33.99	23.47	---	---	---	---	---	---	---	---	---	---
21	33.96	23.06	---	---	---	---	---	---	---	---	---	---
22	33.78	23.41	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	34.26	19.14	---	---	---	---	---	---	---	---	---	---
YEAR	39.38	18.30										

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

MONTGOMERY COUNTY--Continued

WELL NUMBER.--MO Dc 59. SITE ID.--390917077244401. PERMIT NUMBER.--MO-73-1896.

LOCATION.--Lat 39°09'17", long 77°24'44", Hydrologic Unit 02070008, 1 mi north of Poolesville, near Jerusalem Road. Owner: U.S. Geological Survey.

AQUIFER.--Manassas Sandstone, Poolesville Member of Upper Triassic age. Aquifer code: 231MNSS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 260 ft; casing diameter 6 in., to 42 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 370 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.94 ft above land surface.

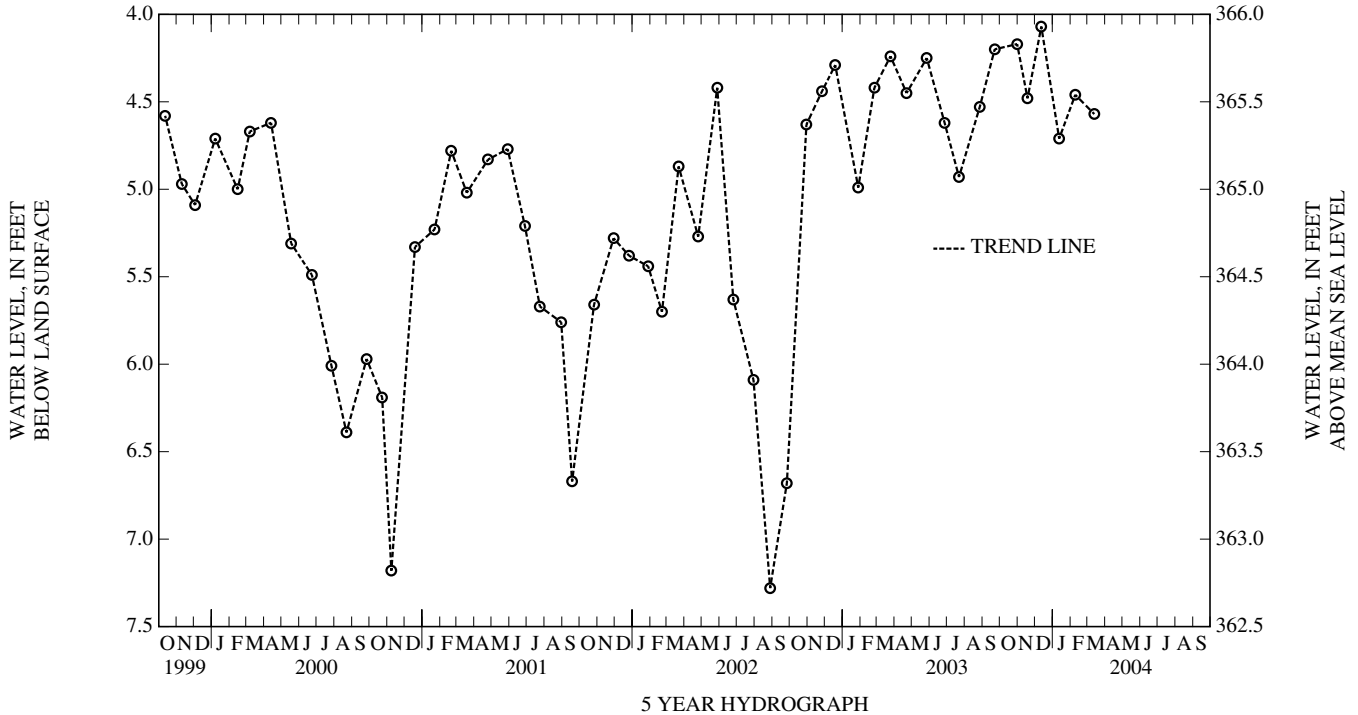
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--June 1990 to March 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.07 ft below land surface, December 12, 2003; lowest measured, 10.70 ft below land surface, September 8, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	4.17	DEC 12, 2003	4.07	FEB 09, 2004	4.46
NOV 18	4.48	JAN 12, 2004	4.71	MAR 13	4.57
HIGHEST	4.07	DEC 12, 2003			
LOWEST	4.71	JAN 12, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

MONTGOMERY COUNTY—Continued

WELL NUMBER.--MO Ec 10. SITE ID.--390451077245901. PERMIT NUMBER.--MO-73-2833.

LOCATION.--Lat 39°04'51", long 77°24'59", Hydrologic Unit 02070008, 3 mi southeast of Poolesville near Sycamore Landing Road, at McKee Beshler Wildlife Management Area. Owner: U.S. Geological Survey.

AQUIFER.--Balls Bluff Siltstone of Upper Triassic age. Aquifer code: 231BLBF.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 855 ft; casing diameter 8 in., to 26 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 200 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.70 ft above land surface.

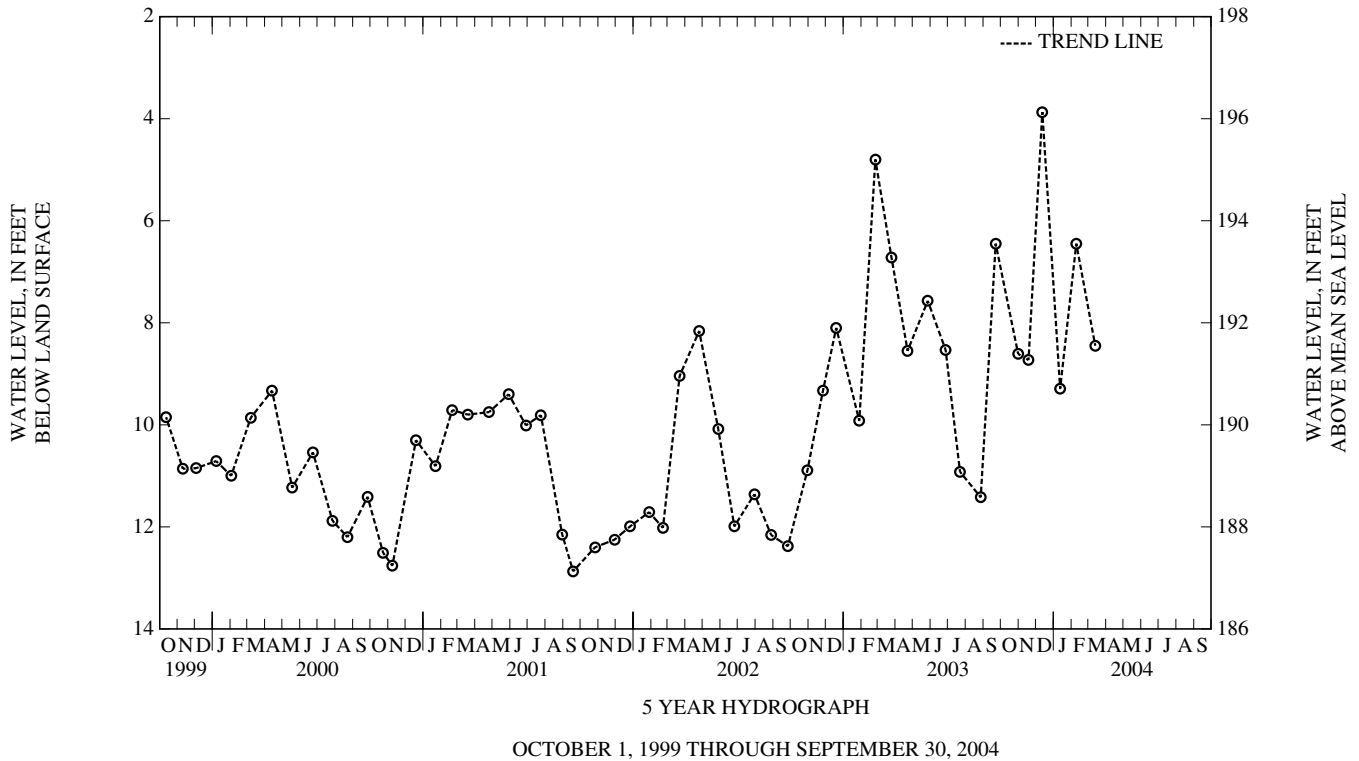
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--August 1990 to March 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.87 ft below land surface, December 12, 2003. lowest measured, 14.52 ft below land surface, July 8, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	8.61	DEC 12, 2003	3.87	FEB 09, 2004	6.45
NOV 18	8.73	JAN 12, 2004	9.29	MAR 13	8.45
HIGHEST	3.87	DEC 12, 2003			
LOWEST	9.29	JAN 12, 2004			



MONTGOMERY COUNTY—Continued

WELL NUMBER.--MO Eh 20. SITE ID.--390434076573002.

LOCATION.--Lat 39°04'34", long 76°57'30", Hydrologic Unit 02070010, at MD Rt. 196 and Fairland Rd., Fairland. Owner: Liberty, Fairland Auto Service.

AQUIFER.--Loch Raven Formation of Cambrian age. Aquifer code: 370LCRV.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 102.9 ft; casing diameter 6 in., to 50 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 405 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land-surface datum.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

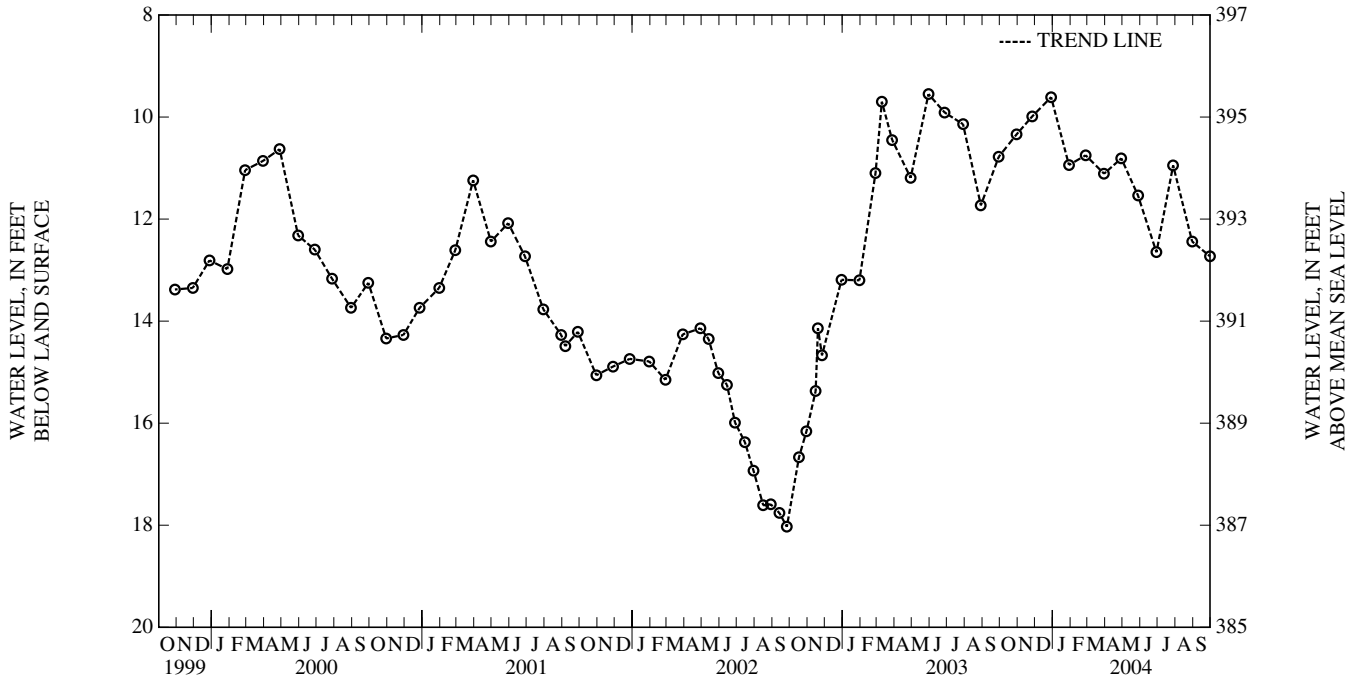
PERIOD OF RECORD.--March 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.39 ft below land surface, June 25, 1972; lowest measured, 18.03 ft below land surface, September 26, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	10.34	JAN 29, 2004	10.94	APR 29, 2004	10.81	JUL 28, 2004	10.95
NOV 26	9.99	FEB 27	10.75	MAY 28	11.54	AUG 30	12.44
DEC 29	9.61	MAR 30	11.11	JUN 29	12.65	SEP 30	12.73

HIGHEST --
LOWEST --



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

PRINCE GEORGES COUNTY

WELL NUMBER.--PG Bc 16. SITE ID.--390151076561501.

LOCATION.--Lat 39°01'51", long 76°56'15", Hydrologic Unit 02070010, at National Agricultural Research Center, Beltsville. Owner: U.S. Department of Agriculture.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Dug, brick-lined, unused, water-table well, measured depth 27.4 ft; casing diameter 40 in.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder from October 1962 to February 1965.

DATUM.--Elevation of land surface is 190 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of steel cover, 0.10 ft above land surface.

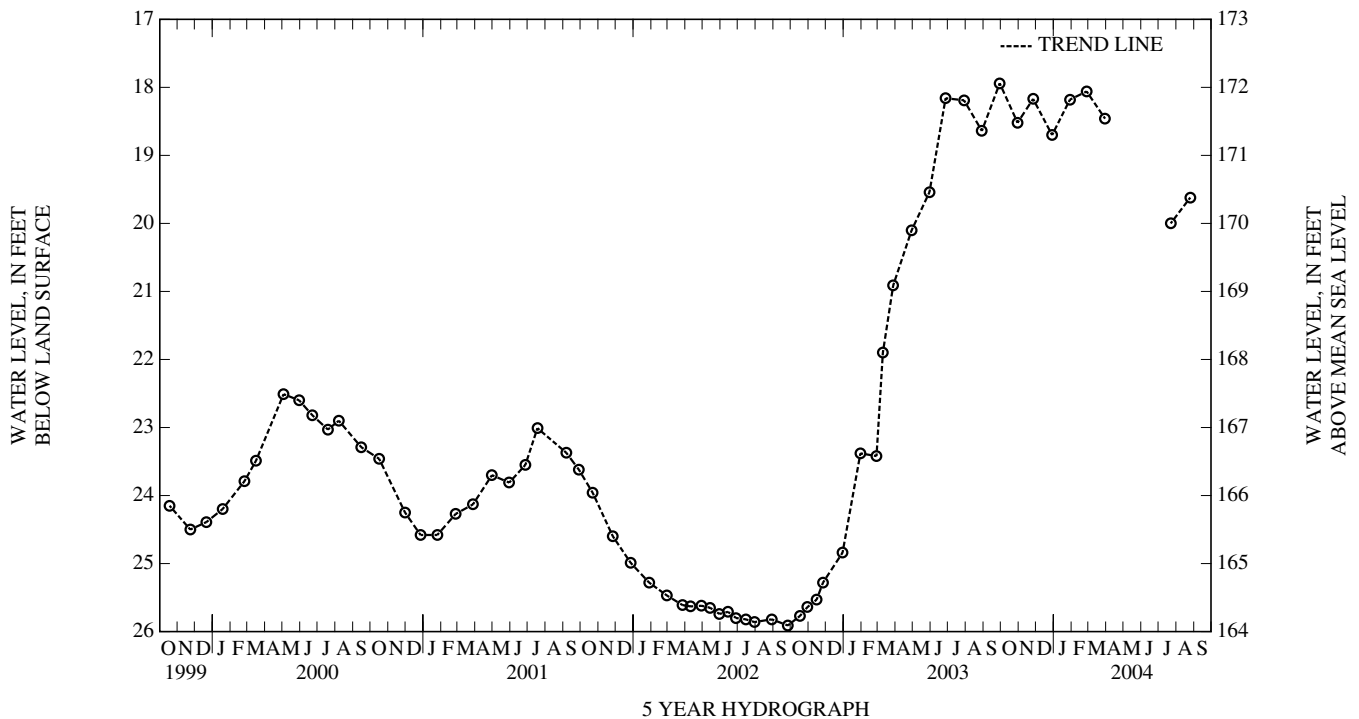
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--September 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.26 ft below land surface, July 6, 1972; lowest measured, 26.46 ft below land surface, July 8, 1981.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	18.52	DEC 29, 2003	18.70	FEB 27, 2004	18.06	JUL 22, 2004	20.00
NOV 26	18.17	JAN 29, 2004	18.18	MAR 30	18.46	AUG 25	19.62
HIGHEST 19.62		AUG 25, 2004					
LOWEST 20.00		JUL 22, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

PRINCE GEORGES COUNTY—Continued

WELL NUMBER.--PG De 21. SITE ID.--385130076465501. PERMIT NUMBER.--PG-02-2875.

LOCATION.--Lat 38°51'30", long 76°46'55", Hydrologic Unit 02060006, Agricultural Experiment Station, Southern Maryland Research and Educational Facility, at Oak Grove. Owner: University of Maryland.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 155 ft; casing diameter 6 in., to 150 ft; screen diameter 6 in., from 150 to 155 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from May 1958 to January 1965.

DATUM.--Elevation of land surface is 95.76 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.90 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

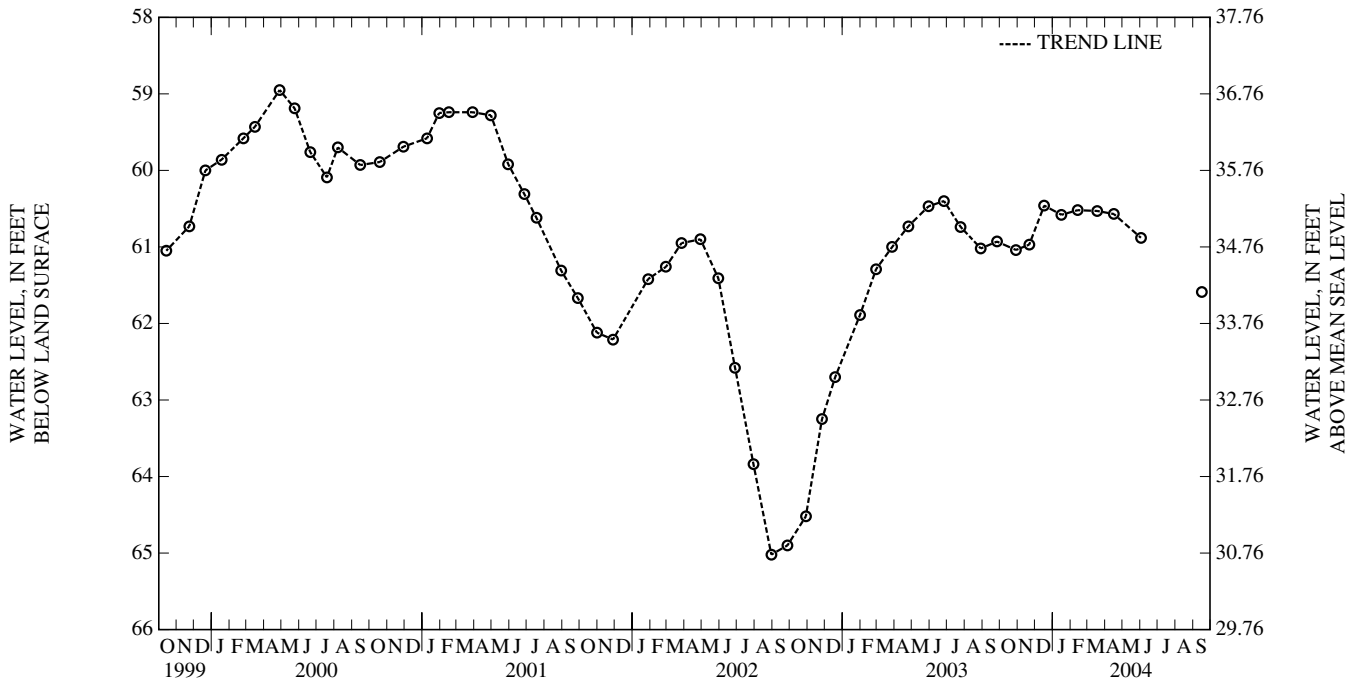
PERIOD OF RECORD.--May 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.39 ft below land surface, May 26, 1958; lowest measured, 65.02 ft below land surface, August 30, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	61.04	JAN 16, 2004	60.58	APR 16, 2004	60.57
NOV 21	60.97	FEB 13	60.52	JUN 02	60.88
DEC 17	60.46	MAR 18	60.53	SEP 16	61.59

HIGHEST 60.46 DEC 17, 2003
 LOWEST 61.59 SEP 16, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

PRINCE GEORGES COUNTY—Continued

WELL NUMBER.--PG Fb 36. SITE ID.--384423077004501. PERMIT NUMBER.--PG-02-4834.

LOCATION.--Lat 38°44'23", long 77°00'45", Hydrologic Unit 02070010, at Broadwater Estates. Owner: Broadwater Citizens Association.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 284 ft; casing diameter 8 in., to 272 ft; screen diameter 8 in., from 272 to 284 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 78 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.46 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. A water level was reported 62 ft below land surface, on May 29, 1957.

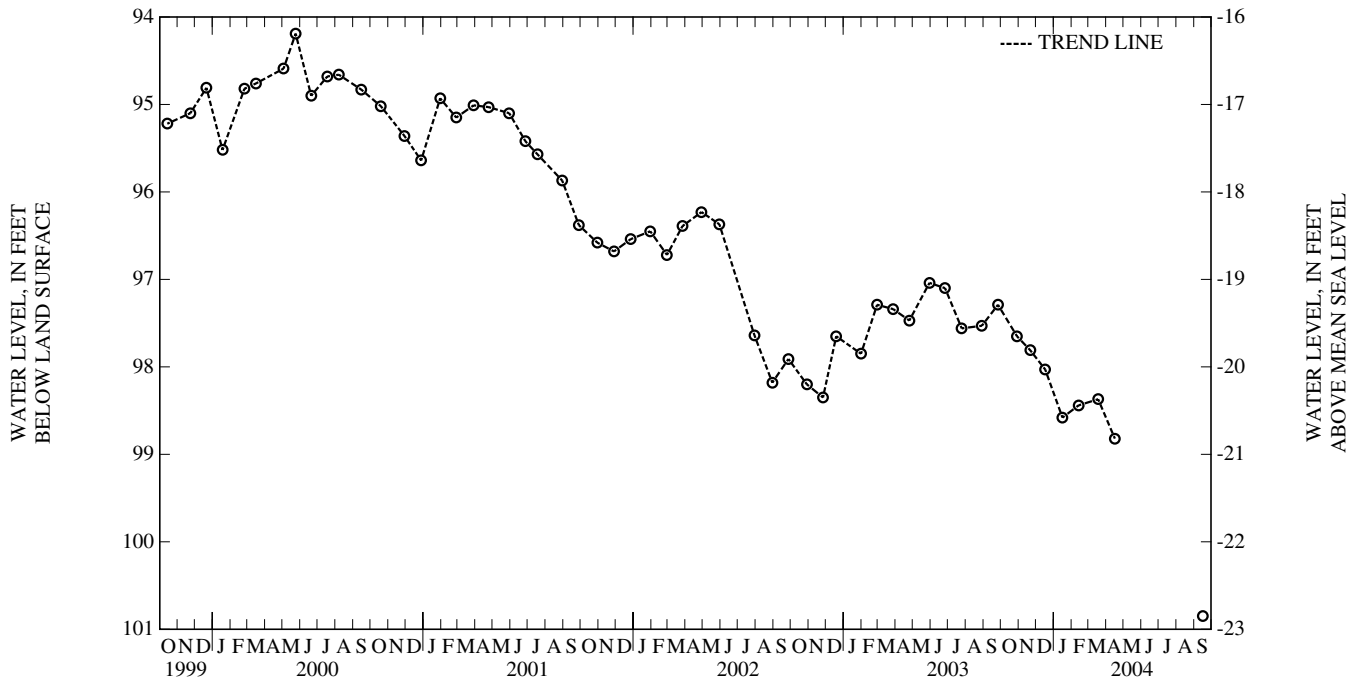
PERIOD OF RECORD.--July 1961, March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.99 ft below land surface, October 3, 1979; lowest measured, 100.85 ft below land surface, September 16, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	97.65	DEC 17, 2003	98.03	FEB 13, 2004	98.44	APR 16, 2004	98.82
NOV 21	97.81	JAN 16, 2004	98.58	MAR 18	98.37	SEP 16	100.85

HIGHEST 97.65 OCT 29, 2003
 LOWEST 100.85 SEP 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

PRINCE GEORGES COUNTY—Continued

WELL NUMBER.--PG Fd 41. SITE ID.--384131076533301. PERMIT NUMBER.--PG-01-8058.

LOCATION.--Lat 38°41'31", long. 76°53'33", Hydrologic Unit 02070010, south side of MD Rt. 373, 1.14 mi west of intersection with MD Rt. 5. Owner: Colonial Investment Corp.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 362 ft; casing diameter 4 in., to 352 ft; screen diameter 2.5 in., from 352 to 362 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 196.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.80 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. A water level was reported as 146 ft below land surface on March 11, 1955. Water levels are affected by local and regional ground-water withdrawal.

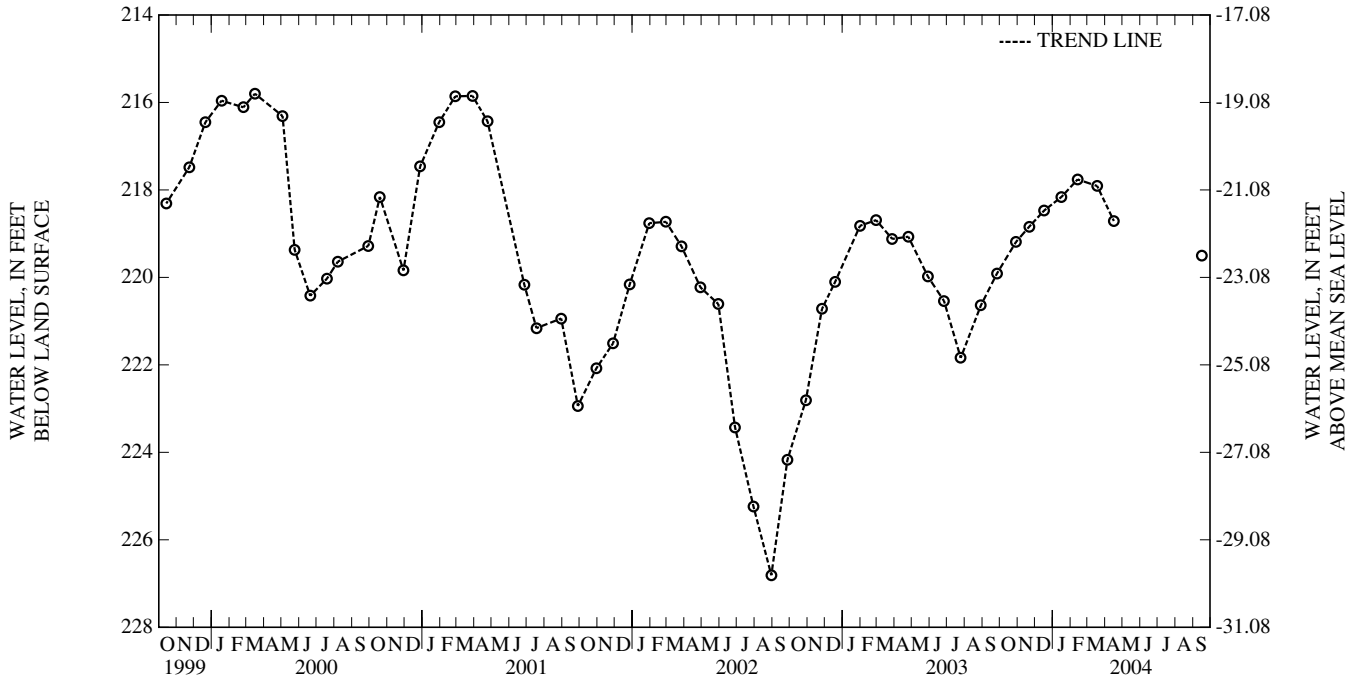
PERIOD OF RECORD.--May 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 157.24 ft below land surface, March 4, 1968; lowest measured, 226.81 ft below land surface, August 30, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	219.19	DEC 17, 2003	218.47	FEB 13, 2004	217.76	APR 16, 2004	218.71
NOV 21	218.84	JAN 16, 2004	218.16	MAR 18	217.91	SEP 16	219.50

HIGHEST 217.76 FEB 13, 2004
 LOWEST 219.50 SEP 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Gd 5. SITE ID.--383957076520601. PERMIT NUMBER.--PG-88-2866.

LOCATION.--Lat 38°39'57", long 76°52'06", Hydrologic Unit 02070011, near northeast corner of intersection with US Rt. 301 and Cedarville Rd., 4 mi northeast of Waldorf. Owner: PANDA Brandywine Power Station.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, production, artesian well, depth 1,360 ft; casing diameter 10 in., to 800 ft; casing diameter 8 in., from 800 to 948 ft, 1,028 to 1,155 ft, 1,170 to 1,188 ft, 1,208 to 1,240 ft, 1,290 to 1,305 ft, and 1350 to 1360 ft; screen diameter 8 in. from 948 to 1,028 ft, 1,155 to 1,170 ft, 1,188 to 1,208 ft, 1,240 to 1,290 ft, and 1,305 to 1,350 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval from December 1994 to April 1995, November 1996 to February 1997, and October 1997 to June 2002, and April 2003 to June 2004 (See REMARKS).

DATUM.--Elevation of land surface is 216.43 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.65 ft above land surface.

REMARKS.--Southern Maryland Ground-Water Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction. On June 11, 2002, the pressure transducer line was accidentally cut, while the well was being serviced.

PERIOD OF RECORD.--September 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.40 ft below sea level, November 5, 1998 (recorder); lowest measured, 233.70 ft below sea level, May 20, 2004 (recorder).

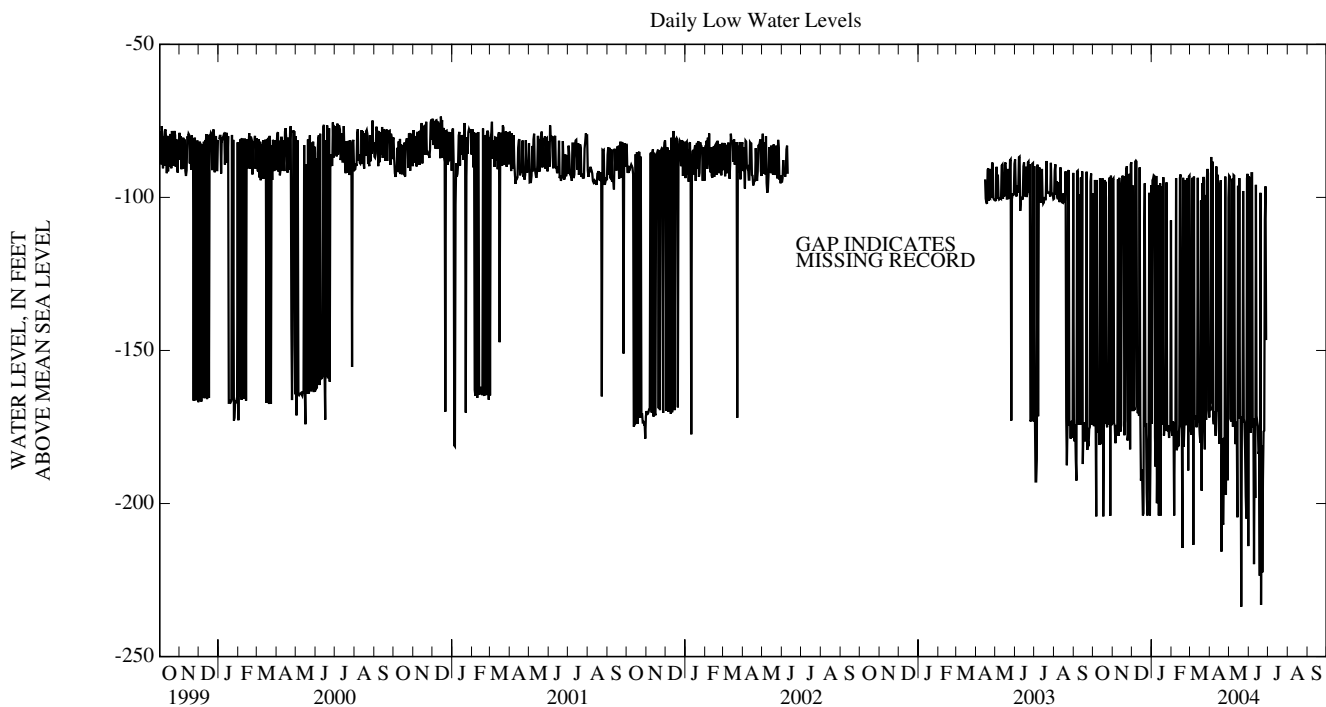
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2003	-92.31	FEB 10, 2004	-99.86	APR 22, 2004	-93.90	JUN 29, 2004	-95.67
NOV 25	-90.52	MAR 15	-93.55	MAY 25	-94.32	SEP 21	-97.45
LOWEST -99.86 FEB 10, 2004							
HIGHEST -90.52 NOV 25, 2003							

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	-91.3	-173.0	-92.9	-94.1	-87.3	-169.8	-92.7	-174.0	-92.8	-174.8	-91.5	-172.6
2	-91.5	-174.4	-93.1	-93.8	-87.5	-96.1	-92.3	-94.4	-92.3	-177.9	-92.9	-176.3
3	-92.8	-174.4	-93.1	-173.7	-87.8	-169.8	-91.3	-93.9	-92.7	-173.1	-92.9	-177.5
4	-92.4	-94.3	-92.9	-174.6	-87.5	-168.4	-90.6	-92.8	-92.5	-174.7	-92.9	-94.3
5	-92.3	-171.8	-92.8	-180.3	-87.5	-169.5	-91.8	-93.0	-93.4	-203.9	-90.8	-93.6
6	-92.8	-204.2	-92.6	-177.2	-87.8	-88.3	-92.3	-178.3	-92.7	-174.3	-90.6	-213.5
7	-93.0	-94.3	-92.8	-174.8	-87.6	-88.0	-91.3	-188.0	-92.5	-173.3	-91.8	-93.2
8	-93.0	-175.3	-92.6	-174.2	-87.6	-88.3	-91.4	-93.0	-92.5	-93.7	-91.0	-171.1
9	-92.6	-176.7	-92.2	-94.1	-87.8	-168.3	-92.7	-199.9	-93.0	-182.6	-91.5	-172.5
10	-93.0	-173.6	-93.5	-177.9	-88.0	-170.5	-92.3	-177.3	-95.8	-181.5	-92.0	-171.4
11	-93.1	-180.8	-92.8	-93.6	-88.5	-169.1	-92.7	-96.1	-94.3	-176.3	-92.4	-175.1
12	-92.6	-93.7	-92.8	-173.0	-88.5	-171.4	-92.7	-203.9	-93.2	-181.3	-92.4	-172.8
13	-92.4	-172.5	-92.8	-176.5	-89.0	-90.2	-93.9	-176.2	-91.5	-174.2	-92.2	-93.6
14	-92.6	-180.3	-92.6	-174.4	-88.9	-170.9	-93.7	-95.4	-91.0	-93.6	-92.7	-164.3
15	-92.6	-180.3	-92.8	-95.5	-89.4	-192.5	-93.5	-203.9	-91.2	-92.5	-91.3	-172.5
16	-93.0	-93.8	-92.6	-92.9	-93.0	-188.8	-93.5	-96.3	-91.2	-174.2	-91.1	-177.4
17	-93.0	-204.2	-92.4	-93.5	-95.1	-192.0	-93.0	-173.1	-92.5	-175.7	-92.1	-180.2
18	-93.7	-174.4	-92.6	-93.1	-97.5	-203.9	-92.8	-174.3	-92.2	-214.5	-93.0	-101.0
19	-93.3	-94.3	-91.7	-177.7	-97.7	-203.2	-92.5	-93.4	-91.2	-93.6	-92.5	-195.8
20	-92.4	-173.9	-91.2	-173.0	-95.4	-114.5	-92.7	-177.8	-92.2	-181.5	-90.6	-95.4
21	-92.3	-94.9	-90.3	-96.2	-93.4	-95.4	-93.4	-174.7	-93.6	-174.5	-90.6	-171.4
22	-91.9	-173.0	-89.3	-90.7	-92.3	-175.0	-93.0	-174.3	-92.9	-94.3	-90.4	-93.3
23	-92.4	-175.1	-89.0	-89.8	-92.7	-173.8	-92.8	-176.2	-91.8	-174.4	-90.7	-174.5
24	-92.9	-155.9	-88.8	-179.4	-92.8	-196.6	-92.7	-95.1	-92.2	-173.5	-92.1	-182.3
25	-92.8	-174.2	-89.9	-177.6	-95.4	-203.9	-92.7	-174.1	-92.5	-173.8	-92.5	-99.2
26	-93.1	-100.2	-89.9	-173.6	-96.1	-183.3	-93.7	-176.4	-92.4	-93.7	-90.2	-172.7
27	-92.6	-93.5	-89.4	-92.3	-95.8	-177.4	-93.7	-174.5	-92.2	-189.2	-89.7	-94.7
28	-92.8	-204.0	-89.2	-182.3	-94.2	-98.5	-93.7	-178.6	-91.8	-93.2	-89.2	-90.7
29	-92.6	-92.9	-88.3	-89.2	-93.5	-203.9	-93.5	-175.9	-90.8	-92.9	-90.4	-92.1
30	-92.4	-174.4	-87.8	-88.5	-92.8	-182.6	-93.4	-175.0	---	---	-87.6	-169.5
31	-92.8	-173.6	---	---	-92.5	-96.1	-93.5	-107.5	---	---	-87.5	-171.9
MONTH	-91.3	-204.2	-87.8	-182.3	-87.3	-203.9	-90.6	-203.9	-90.8	-214.5	-87.5	-213.5

PRINCE GEORGES COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-86.4	-168.1	-91.0	-92.9	-91.4	-93.1	---	---	---	---	---	---
2	-86.4	-169.6	-90.8	-93.2	-91.4	-172.0	---	---	---	---	---	---
3	-85.9	-86.8	-91.3	-172.3	-91.8	-93.5	---	---	---	---	---	---
4	-85.7	-167.2	-92.4	-173.0	-91.6	-176.9	---	---	---	---	---	---
5	-85.6	-88.3	-92.2	-173.0	-91.4	-92.1	---	---	---	---	---	---
6	-86.1	-172.4	-92.0	-93.9	-91.1	-92.1	---	---	---	---	---	---
7	-86.1	-174.1	-91.8	-174.9	-90.7	-175.1	---	---	---	---	---	---
8	-87.6	-170.2	-91.1	-92.7	-91.1	-172.2	---	---	---	---	---	---
9	-87.8	-170.2	-90.5	-92.9	-91.2	-219.8	---	---	---	---	---	---
10	-88.5	-177.9	-90.6	-173.0	-92.5	-178.4	---	---	---	---	---	---
11	-88.1	-89.9	-92.7	-180.6	-92.3	-198.2	---	---	---	---	---	---
12	-89.5	-169.8	-92.2	-173.7	-93.5	-95.9	---	---	---	---	---	---
13	-89.7	-92.6	-91.7	-174.0	-92.6	-171.3	---	---	---	---	---	---
14	-89.7	-169.1	-92.4	-204.5	-92.6	-173.4	---	---	---	---	---	---
15	-89.5	-176.0	-92.0	-96.2	-93.1	-174.8	---	---	---	---	---	---
16	-92.8	-180.5	-91.5	-172.3	-94.5	-183.8	---	---	---	---	---	---
17	-91.1	-96.1	-91.3	-93.7	-95.6	-182.8	---	---	---	---	---	---
18	-90.6	-94.4	-91.5	-172.3	-94.9	-223.6	---	---	---	---	---	---
19	-92.3	-215.7	-91.3	-171.6	-94.4	-98.5	---	---	---	---	---	---
20	-93.9	-178.8	-91.5	-233.7	-93.8	-233.1	---	---	---	---	---	---
21	-93.5	-206.3	-91.3	-172.8	-93.5	-180.9	---	---	---	---	---	---
22	-92.4	-206.9	-91.7	-173.5	-95.7	-222.5	---	---	---	---	---	---
23	-91.7	-178.7	-93.6	-97.9	-96.1	-192.1	---	---	---	---	---	---
24	-91.0	-178.5	-93.7	-172.3	-96.1	-176.5	---	---	---	---	---	---
25	-90.6	-93.2	-93.0	-173.7	-95.4	-176.2	---	---	---	---	---	---
26	-90.8	-197.2	-92.8	-182.2	-95.2	-107.3	---	---	---	---	---	---
27	-91.0	-172.8	-92.5	-197.5	-94.5	-96.4	---	---	---	---	---	---
28	-92.0	-179.9	-93.3	-204.9	-94.2	-146.6	---	---	---	---	---	---
29	-90.6	-192.4	-91.8	-93.7	---	---	---	---	---	---	---	---
30	-91.3	-100.1	-91.4	-92.3	---	---	---	---	---	---	---	---
31	---	---	-91.4	-213.9	---	---	---	---	---	---	---	---
MONTH	-85.6	-215.7	-90.5	-233.7	-90.7	-233.1	---	---	---	---	---	---
YEAR	-85.6	-233.7										



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

PRINCE GEORGES COUNTY—Continued

WELL NUMBER.--PG Hf 32 SITE ID.--383250076405303. PERMIT NUMBER.--PG-73-0065

LOCATION.--Lat 38°32'50", long 76°40'53", Hydrologic Unit 02060006, at Chalk Point Power Plant, on east side of canal. Owner: Mirant Corp.

AQUIFER.--Lower Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1545 ft; casing diameter 1 in., to 1030 ft, and casing diameter 2 in., from 1030 to 1525 ft, and 1530 to 1545 ft; screen diameter 3 in., from 1525 to 1530 ft.

DATUM.--Altitude of land surface is 10.48 ft above National Geodetic Vertical Datum of 1929, Measuring point: Top of 1 in. casing, 5.10 ft above land surface.

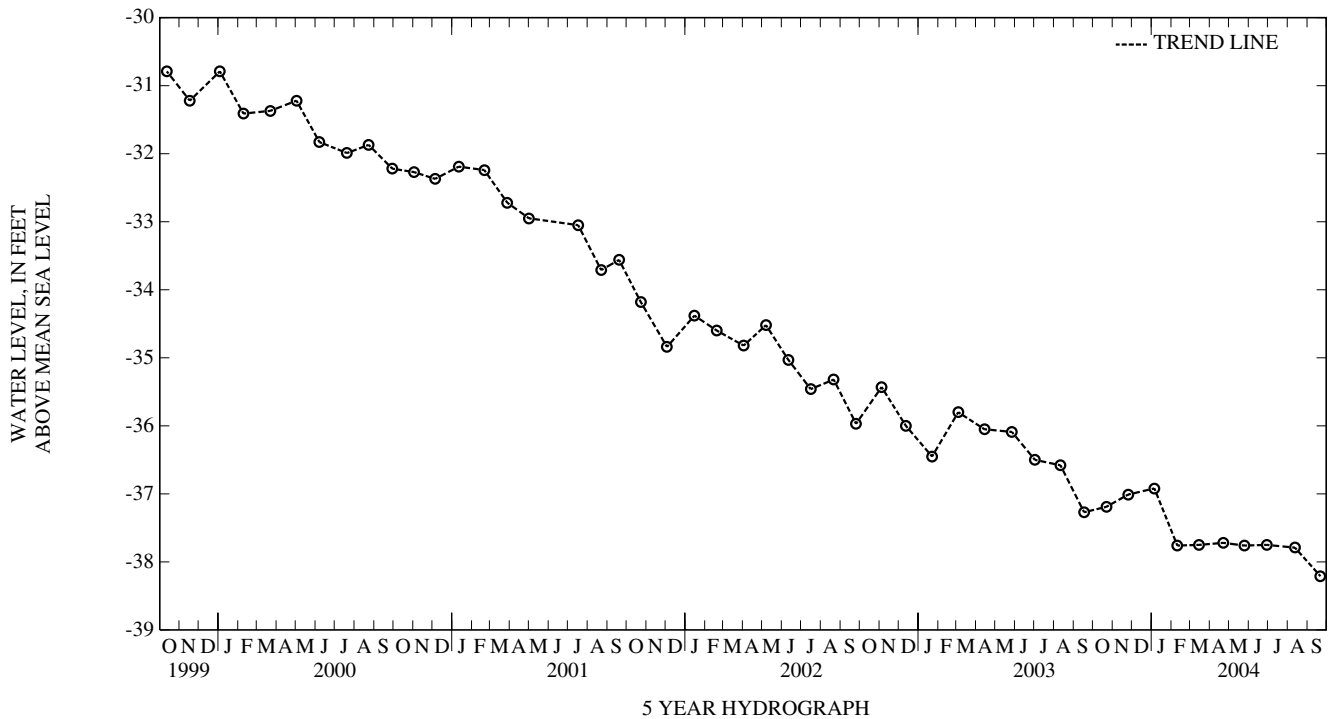
REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. This well is inside well PG Hf 44, screens separated by a packer.

PERIOD OF RECORD.--June 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.78 ft above sea level, June 24, 1973; lowest measured, 38.21 ft below sea level, September 21, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2003	-37.19	FEB 10, 2004	-37.76	MAY 25, 2004	-37.76	SEP 21, 2004	-38.21
NOV 25	-37.01	MAR 15	-37.75	JUN 29	-37.75		
JAN 05, 2004	-36.92	APR 22	-37.72	AUG 12	-37.79		
LOWEST -38.21 SEP 21, 2004							
HIGHEST -36.92 JAN 05, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Hf 40. SITE ID.--383348076411301. PERMIT NUMBER.--PG-73-0298.

LOCATION.--Lat 38°33'48", long 76°41'13", Hydrologic Unit 02060006, at Chalk Point Power Plant, 0.4 mi. south of Eagle Harbor. Owner: Maryland Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 870 ft; casing diameter 6 in., to 150 ft; casing diameter 4 in., from 150 to 860 ft; screen diameter 4 in., from 860 to 870 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from December 1974 to July 1976. Equipped with digital water-level recorder--60-minute recorder interval from July 1976 to current year.

DATUM.--Elevation of land surface is 27.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.59 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.64 ft above sea level, January 11, 1975 (recorder); lowest measured, 42.04 ft below sea level, January 25, 2004 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2003	-39.38	FEB 10, 2004	-40.56	MAY 25, 2004	-39.31	SEP 21, 2004	-40.03
NOV 25	-39.34	MAR 15	-39.58	JUN 29	-39.80		
JAN 05, 2004	-39.27	APR 22	-38.93	AUG 12	-39.51		

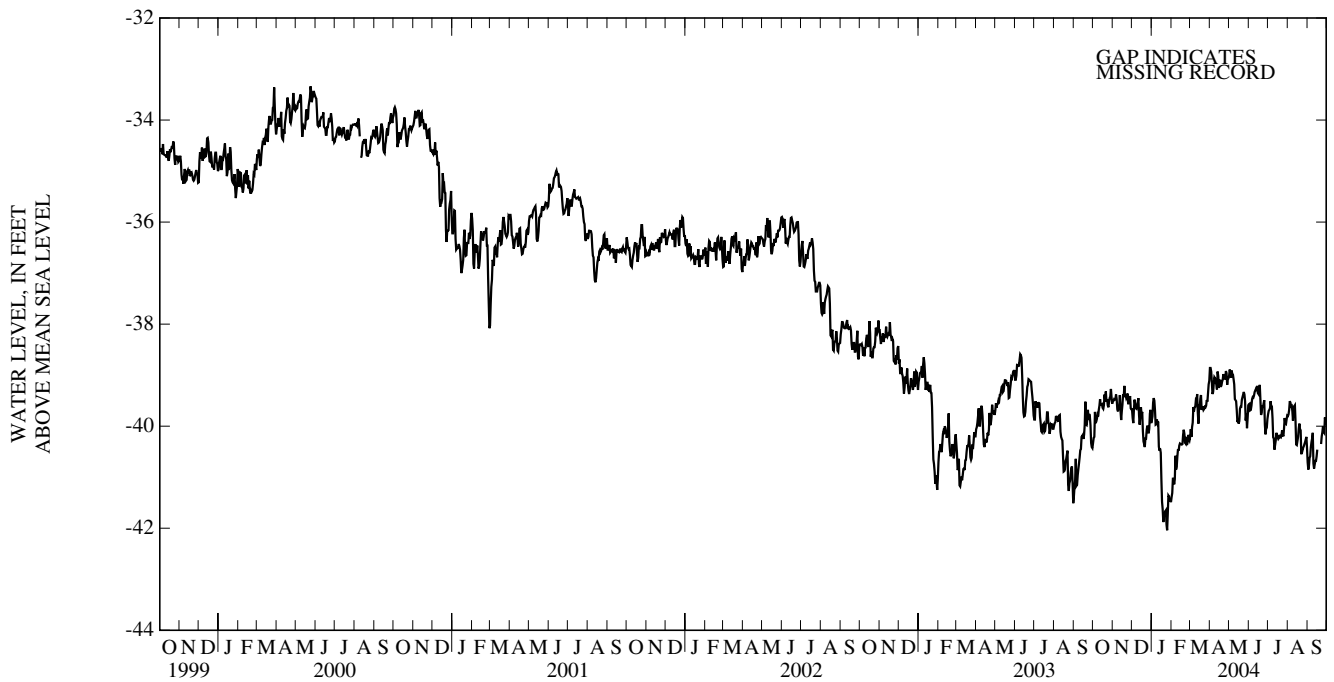
LOWEST -40.56 FEB 10, 2004
 HIGHEST -38.93 APR 22, 2004

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	-40.02	-40.33	-39.34	-39.50	-39.47	-39.67	-39.53	-39.89	-41.25	-41.39	-39.95	-40.21
2	-39.98	-40.23	-39.34	-39.50	-39.63	-39.84	-39.50	-39.81	-41.03	-41.31	-39.79	-40.06
3	-39.66	-40.21	-39.29	-39.47	-39.59	-39.94	-39.34	-39.54	-40.55	-41.03	-40.01	-40.21
4	-39.57	-39.72	-39.29	-39.48	-39.48	-39.67	-39.28	-39.45	-40.68	-41.03	-39.73	-40.02
5	-39.63	-39.94	-39.20	-39.47	-39.27	-39.48	-39.25	-39.50	-40.89	-41.14	-39.50	-39.93
6	-39.62	-39.91	-39.12	-39.38	-39.29	-39.57	-39.46	-39.69	-40.46	-41.04	-39.32	-39.63
7	-39.55	-39.86	-39.25	-39.47	-39.49	-39.65	-39.65	-39.97	-40.32	-40.58	-39.35	-39.71
8	-39.51	-39.78	-39.32	-39.67	-39.40	-39.66	-39.61	-39.96	-40.48	-40.85	-39.35	-39.63
9	-39.52	-39.81	-39.47	-39.71	-39.31	-39.59	-39.55	-39.87	-40.36	-40.79	-39.27	-39.62
10	-39.39	-39.68	-39.37	-39.63	-39.19	-39.53	-39.63	-39.94	-40.29	-40.59	-39.22	-39.49
11	-39.31	-39.60	-39.25	-39.60	-38.84	-39.45	-39.63	-39.91	-40.25	-40.45	-39.08	-39.51
12	-39.15	-39.47	-39.19	-39.39	-39.45	-39.79	-39.83	-40.40	-40.22	-40.48	-38.99	-39.37
13	-39.29	-39.58	-39.05	-39.70	-39.69	-39.97	-40.21	-40.48	-40.18	-40.38	-39.37	-39.73
14	-39.01	-39.58	-39.59	-39.88	-39.13	-39.82	-39.99	-40.44	-40.17	-40.34	-39.51	-39.95
15	-38.98	-39.57	-39.51	-39.71	-39.19	-39.63	-39.99	-40.52	-40.17	-40.35	-39.46	-39.62
16	-39.41	-39.64	-39.30	-39.58	-39.59	-39.78	-40.52	-41.05	-40.18	-40.35	-39.32	-39.63
17	-39.45	-39.66	-39.28	-39.38	-39.48	-39.72	-41.05	-41.48	-40.17	-40.36	-39.25	-39.46
18	-39.30	-39.59	-39.13	-39.43	-39.60	-40.09	-41.27	-41.63	-40.17	-40.35	-39.19	-39.39
19	-39.23	-39.38	-38.82	-39.21	-39.99	-40.30	-41.57	-41.88	-39.72	-40.17	-39.13	-39.68
20	-39.24	-39.49	-38.82	-39.43	-40.10	-40.35	-41.55	-41.77	-39.61	-40.07	-39.15	-39.65
21	-39.13	-39.32	-39.10	-39.39	-40.07	-40.41	-41.47	-41.72	-39.57	-40.15	-38.99	-39.61
22	-39.23	-39.52	-39.25	-39.45	-39.92	-40.24	-41.23	-41.67	-39.99	-40.32	-39.47	-39.68
23	-39.27	-39.47	-39.10	-39.42	-39.87	-40.24	-41.35	-41.65	-40.05	-40.34	-39.38	-39.66
24	-39.27	-39.59	-38.95	-39.36	-39.52	-40.07	-41.38	-41.93	-39.88	-40.21	-39.36	-39.62
25	-39.34	-39.63	-39.26	-39.57	-39.67	-39.99	-41.66	-42.04	-40.15	-40.37	-39.45	-39.63
26	-39.22	-39.53	-39.26	-39.48	-39.73	-40.04	-41.31	-41.72	-40.05	-40.32	-39.39	-39.60
27	-39.04	-39.45	-39.21	-39.48	-39.87	-40.14	-40.81	-41.36	-39.97	-40.17	-39.34	-39.49
28	-39.11	-39.42	-38.97	-39.41	-39.60	-40.05	-40.88	-41.38	-40.11	-40.25	-39.31	-39.52
29	-39.03	-39.27	-39.14	-39.65	-39.50	-39.75	-41.36	-41.48	-40.09	-40.28	-39.08	-39.35
30	-39.22	-39.44	-39.46	-39.67	-39.45	-39.68	-41.28	-41.42	---	---	-39.00	-39.18
31	-39.34	-39.56	---	---	-39.53	-39.94	-41.33	-41.49	---	---	-38.86	-39.11
MONTH	-38.98	-40.33	-38.82	-39.88	-38.84	-40.41	-39.25	-42.04	-39.57	-41.39	-38.86	-40.21

PRINCE GEORGES COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	-38.60	-38.86	-38.82	-39.01	-39.35	-39.57	-39.51	-39.77	-39.49	-39.80	-40.26	-40.71				
2	-38.61	-38.86	-38.69	-38.89	-39.30	-39.56	-39.46	-39.70	-39.46	-39.77	-40.53	-40.85				
3	-38.73	-38.93	-38.59	-38.97	-39.34	-39.69	-39.43	-39.68	-39.33	-39.68	-40.41	-40.78				
4	-38.57	-39.14	-38.77	-39.05	-39.40	-39.68	-39.32	-39.65	-39.29	-39.51	-40.40	-40.62				
5	-39.03	-39.37	-38.69	-38.91	-39.12	-39.60	-39.30	-39.51	-39.31	-39.54	-40.36	-40.59				
6	-38.99	-39.33	-38.69	-38.98	-39.23	-39.47	-39.37	-39.62	-39.42	-39.61	-40.11	-40.41				
7	-38.79	-39.16	-38.64	-38.99	-39.13	-39.43	-39.34	-39.62	-39.40	-39.60	-40.11	-40.31				
8	-38.74	-39.04	-38.77	-39.08	-39.19	-39.44	-39.42	-39.85	-39.43	-39.70	-40.00	-40.24				
9	-38.75	-39.06	-38.76	-39.18	-39.13	-39.40	-39.79	-40.22	-39.52	-39.89	-39.82	-40.13				
10	-38.88	-39.15	-39.18	-39.47	-39.09	-39.33	-39.98	-40.24	-39.46	-39.66	-40.13	-40.73				
11	-38.94	-39.18	-39.33	-39.49	-38.97	-39.30	-40.10	-40.46	-39.46	-39.61	-40.65	-40.83				
12	-38.79	-39.28	-39.34	-39.51	-38.97	-39.27	-40.07	-40.37	-39.41	-39.59	-40.58	-40.75				
13	-38.69	-38.93	-39.34	-39.69	-39.07	-39.31	-40.02	-40.28	-39.33	-39.91	-40.45	-40.68				
14	-38.69	-39.02	-39.58	-39.92	-39.03	-39.21	-39.86	-40.13	-39.84	-40.36	-40.41	-40.68				
15	-38.92	-39.25	-39.60	-39.88	-39.01	-39.35	-39.79	-40.19	-40.15	-40.37	-40.21	-40.59				
16	-38.94	-39.19	-39.62	-39.95	-39.11	-39.37	-40.03	-40.22	-40.04	-40.29	-40.19	-40.46				
17	-38.82	-39.09	-39.60	-39.90	-39.09	-39.30	-40.00	-40.25	-39.82	-40.21	---	---				
18	-38.85	-39.23	-39.45	-39.66	-38.93	-39.19	-39.92	-40.23	-39.66	-40.05	---	---				
19	-38.83	-39.20	-39.36	-39.62	-38.97	-39.48	-39.93	-40.17	-39.62	-39.95	---	---				
20	-38.81	-39.13	-39.37	-39.62	-39.43	-39.78	-39.91	-40.21	-39.71	-40.06	---	---				
21	-38.77	-39.09	-39.24	-39.48	-39.51	-39.73	-39.96	-40.22	-39.69	-40.08	---	---				
22	-38.72	-38.98	-39.22	-39.43	-39.36	-39.59	-39.81	-40.18	-40.08	-40.55	-39.93	-40.35				
23	-38.79	-39.03	-39.13	-39.38	-39.40	-39.63	-39.81	-40.08	-40.23	-40.44	-39.87	-40.20				
24	-38.89	-39.07	-39.11	-39.33	-39.36	-39.56	-39.91	-40.17	-40.23	-40.47	-39.83	-40.12				
25	-38.85	-39.07	-39.18	-39.38	-39.33	-39.49	-39.91	-40.20	-40.17	-40.42	-39.71	-40.00				
26	-38.71	-38.92	-39.29	-39.51	-39.35	-39.97	-39.63	-40.04	-40.16	-40.39	-39.68	-40.11				
27	-38.78	-38.96	-39.51	-39.89	-39.88	-40.16	-39.55	-39.84	-40.13	-40.35	-39.70	-40.13				
28	-38.88	-39.19	-39.54	-39.75	-39.70	-40.05	-39.54	-39.95	-40.09	-40.31	-39.33	-39.83				
29	-38.91	-39.06	-39.63	-40.04	-39.67	-40.03	-39.62	-39.96	-40.03	-40.26	-39.50	-39.95				
30	-38.86	-39.06	-39.50	-39.84	-39.59	-39.86	-39.56	-39.87	-39.92	-40.21	-39.43	-39.95				
31	---	---	-39.45	-39.59	---	---	-39.50	-39.79	-39.91	-40.43	---	---				
MONTH	-38.57	-39.37	-38.59	-40.04	-38.93	-40.16	-39.30	-40.46	-39.29	-40.55	-39.33	-40.85				
YEAR	-38.57	-42.04														

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Hf 41. SITE ID.--383348076411302. PERMIT NUMBER.--PG-73-0297.

LOCATION.--Lat 38°33'48", long 76°41'13", Hydrologic Unit 02060006, at Chalk Point Power Plant, 0.4 mi. south of Eagle Harbor. Owner: Maryland Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 665 ft; casing diameter 6 in., to 150 ft; casing diameter 4 in., from 150 to 644 ft, and 654 to 665 ft; screen diameter 4 in., from 644 to 654 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from December 1974 to July 1976. Equipped with digital water-level recorder--60-minute recorder interval from July 1976 to current year.

DATUM.--Elevation of land surface is 28.30 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.65 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.85 ft below sea level, January 1, 1975 (recorder); lowest measured, 52.00 ft below sea level, August 22, 2004 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2003	-46.85	FEB 10, 2004	-46.65	MAY 25, 2004	-47.94	SEP 21, 2004	-49.00
NOV 25	-46.43	MAR 15	-45.53	JUN 29	-48.33		
JAN 05, 2004	-46.28	APR 22	-45.39	AUG 12	-51.40		

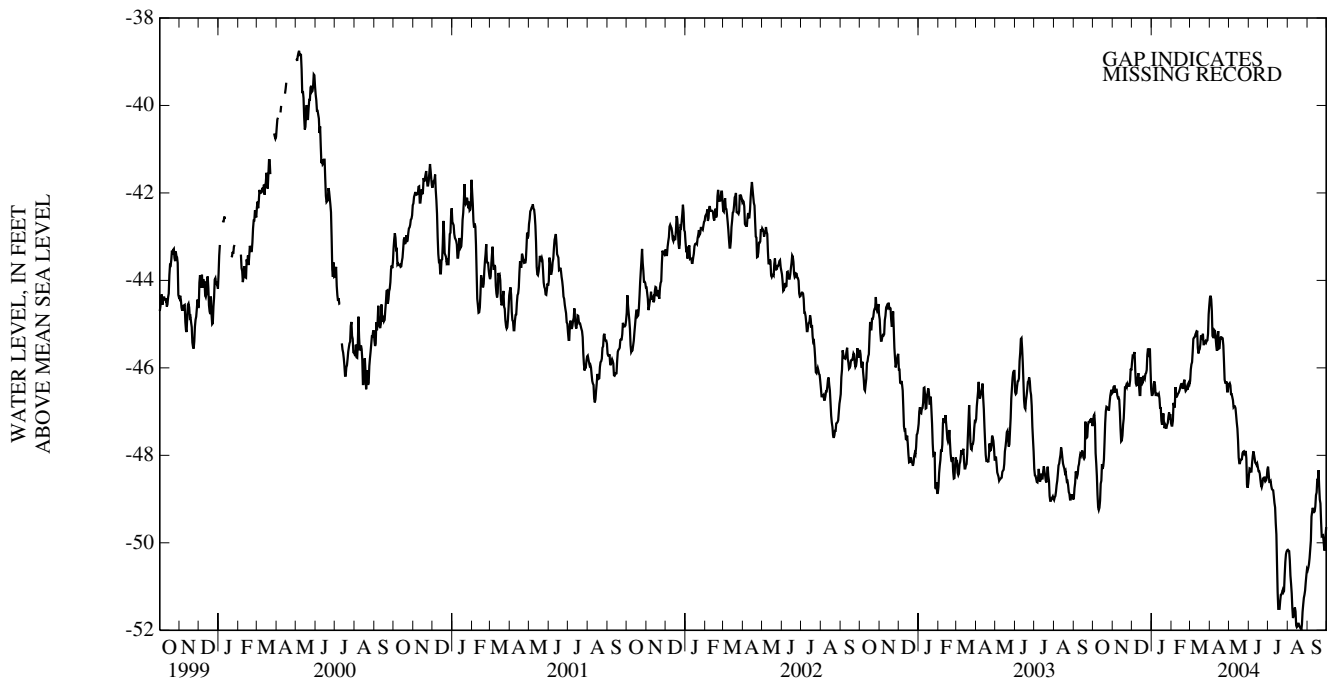
LOWEST -51.40 AUG 12, 2004
 HIGHEST -45.39 APR 22, 2004

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	-47.10	-47.28	-46.43	-46.56	-45.73	-45.88	-46.49	-46.62	-47.26	-47.32	-46.04	-46.30
2	-47.04	-47.10	-46.42	-46.44	-45.68	-45.73	-46.58	-46.62	-47.21	-47.32	-45.86	-46.04
3	-46.97	-47.07	-46.35	-46.42	-45.68	-45.74	-46.37	-46.58	-46.78	-47.21	-45.86	-45.92
4	-46.97	-47.28	-46.31	-46.42	-45.54	-45.68	-46.26	-46.37	-46.70	-46.80	-45.63	-45.87
5	-47.28	-47.95	-46.42	-46.57	-45.54	-45.64	-46.26	-46.31	-46.80	-46.89	-45.34	-45.63
6	-47.95	-48.19	-46.40	-46.50	-45.64	-46.03	-46.27	-46.39	-46.38	-46.89	-45.10	-45.34
7	-48.19	-48.47	-46.43	-46.50	-46.03	-46.35	-46.39	-46.62	-46.38	-46.44	-45.20	-45.31
8	-48.47	-48.90	-46.48	-46.63	-46.35	-46.40	-46.59	-46.62	-46.44	-46.66	-45.21	-45.30
9	-48.90	-49.19	-46.63	-46.69	-46.20	-46.39	-46.55	-46.60	-46.58	-46.66	-45.09	-45.25
10	-49.19	-49.25	-46.62	-46.68	-46.12	-46.23	-46.57	-46.63	-46.58	-46.63	-45.05	-45.21
11	-49.04	-49.20	-46.66	-46.73	-45.81	-46.12	-46.60	-46.63	-46.55	-46.59	-45.15	-45.28
12	-48.65	-49.04	-46.73	-47.01	-45.98	-46.42	-46.54	-46.60	-46.50	-46.57	-45.02	-45.15
13	-48.56	-48.65	-47.01	-47.39	-46.42	-46.62	-46.60	-46.70	-46.48	-46.53	-45.14	-45.54
14	-48.20	-48.58	-47.39	-47.68	-46.02	-46.62	-46.70	-46.93	-46.38	-46.48	-45.54	-45.67
15	-47.99	-48.20	-47.55	-47.66	-46.02	-46.21	-46.73	-46.90	-46.37	-46.41	-45.50	-45.60
16	-48.16	-48.31	-47.30	-47.55	-46.21	-46.32	-46.90	-47.21	-46.32	-46.37	-45.46	-45.57
17	-48.10	-48.25	-47.16	-47.30	-46.32	-46.36	-47.21	-47.30	-46.32	-46.37	-45.26	-45.46
18	-47.70	-48.10	-46.83	-47.16	-46.13	-46.33	-46.83	-47.22	-46.34	-46.46	-45.15	-45.26
19	-47.26	-47.70	-46.34	-46.83	-46.12	-46.18	-46.84	-47.04	-46.32	-46.46	-45.07	-45.32
20	-46.99	-47.26	-46.29	-46.45	-46.14	-46.22	-47.04	-47.26	-46.27	-46.34	-45.13	-45.33
21	-46.69	-46.99	-46.35	-46.45	-46.14	-46.25	-47.26	-47.38	-46.11	-46.27	-44.95	-45.22
22	-46.70	-46.89	-46.35	-46.40	-46.04	-46.14	-47.20	-47.32	-46.22	-46.45	-45.22	-45.46
23	-46.88	-46.90	-46.35	-46.44	-46.05	-46.12	-47.20	-47.37	-46.45	-46.53	-45.40	-45.46
24	-46.78	-46.93	-46.26	-46.37	-45.70	-46.05	-47.22	-47.37	-46.22	-46.51	-45.31	-45.42
25	-46.92	-46.96	-46.26	-46.41	-45.56	-45.70	-47.23	-47.30	-46.23	-46.45	-45.38	-45.39
26	-46.76	-46.96	-46.40	-46.41	-45.56	-45.56	-47.12	-47.26	-46.36	-46.50	-45.36	-45.42
27	-46.60	-46.78	-46.29	-46.41	-45.56	-45.70	-46.82	-47.12	-46.28	-46.36	-45.36	-45.38
28	-46.55	-46.64	-45.90	-46.29	-45.56	-45.75	-46.82	-47.02	-46.29	-46.33	-45.22	-45.37
29	-46.38	-46.55	-45.90	-46.02	-45.55	-45.56	-47.02	-47.10	-46.30	-46.37	-44.78	-45.22
30	-46.38	-46.50	-45.88	-46.06	-45.56	-46.05	-47.01	-47.06	---	---	-44.57	-44.78
31	-46.49	-46.58	---	---	-46.05	-46.49	-47.05	-47.26	---	---	-44.40	-44.57
MONTH	-46.38	-49.25	-45.88	-47.68	-45.54	-46.62	-46.26	-47.38	-46.11	-47.32	-44.40	-46.30

PRINCE GEORGES COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER										
1	-44.22	-44.40	-46.35	-46.37	-48.30	-48.46	-48.12	-48.26	-50.12	-50.16	-50.57	-50.63				
2	-44.19	-44.35	-46.14	-46.35	-48.13	-48.30	-48.25	-48.43	-50.13	-50.18	-50.46	-50.57				
3	-44.35	-44.43	-46.08	-46.40	-48.14	-48.31	-48.43	-48.61	-50.15	-50.19	-50.35	-50.49				
4	-44.35	-44.70	-46.40	-46.60	-48.29	-48.37	-48.53	-48.61	-50.19	-50.40	-50.15	-50.35				
5	-44.70	-45.27	-46.49	-46.60	-48.16	-48.37	-48.51	-48.59	-50.40	-50.75	-49.95	-50.15				
6	-45.27	-45.30	-46.54	-46.67	-48.02	-48.17	-48.59	-48.70	-50.75	-50.94	-49.40	-49.95				
7	-45.13	-45.30	-46.64	-46.74	-47.88	-48.02	-48.69	-48.77	-50.94	-51.16	-49.29	-49.40				
8	-45.08	-45.14	-46.74	-46.90	-47.88	-47.91	-48.72	-48.79	-51.16	-51.49	-49.20	-49.29				
9	-45.08	-45.16	-46.76	-46.88	-47.90	-47.98	-48.72	-48.80	-51.49	-51.72	-48.98	-49.20				
10	-45.16	-45.33	-46.76	-46.88	-47.96	-48.07	-48.78	-48.94	-51.57	-51.67	-48.99	-49.30				
11	-45.33	-45.51	-46.86	-46.92	-48.06	-48.17	-48.93	-49.09	-51.46	-51.57	-49.28	-49.30				
12	-45.28	-45.61	-46.91	-47.08	-48.11	-48.18	-49.09	-49.19	-51.46	-51.48	-49.16	-49.28				
13	-45.06	-45.28	-47.08	-47.25	-48.17	-48.22	-49.19	-49.55	-51.45	-51.57	-48.91	-49.16				
14	-45.03	-45.16	-47.24	-47.39	-48.06	-48.19	-49.55	-49.81	-51.57	-51.89	-48.83	-48.91				
15	-45.16	-45.56	-47.38	-47.66	-48.06	-48.27	-49.81	-50.49	-51.89	-51.93	-48.56	-48.85				
16	-45.34	-45.55	-47.66	-48.05	-48.25	-48.36	-50.49	-51.13	-51.76	-51.91	-48.49	-48.56				
17	-45.15	-45.34	-48.04	-48.18	-48.32	-48.36	-51.13	-51.51	-51.80	-51.85	-48.34	-48.56				
18	-45.15	-45.30	-48.01	-48.18	-48.34	-48.42	-51.49	-51.51	-51.82	-51.85	-48.09	-48.34				
19	-45.20	-45.30	-47.96	-48.10	-48.41	-48.56	-51.33	-51.51	-51.85	-51.90	-48.21	-48.72				
20	-45.18	-45.33	-48.08	-48.10	-48.56	-48.68	-51.16	-51.33	-51.89	-51.94	-48.72	-49.01				
21	-45.32	-45.33	-47.94	-48.09	-48.65	-48.73	-51.15	-51.19	-51.91	-51.95	-49.01	-49.10				
22	-45.32	-45.49	-47.90	-47.95	-48.53	-48.67	-51.13	-51.18	-51.87	-52.00	-49.10	-49.51				
23	-45.49	-45.86	-47.89	-47.92	-48.49	-48.53	-51.01	-51.13	-51.58	-51.87	-49.51	-49.85				
24	-45.86	-46.27	-47.89	-47.91	-48.50	-48.52	-51.01	-51.08	-51.41	-51.58	-49.65	-49.84				
25	-46.27	-46.34	-47.91	-47.97	-48.45	-48.55	-51.07	-51.13	-51.26	-51.41	-49.65	-49.83				
26	-46.20	-46.34	-47.87	-47.95	-48.42	-48.49	-50.74	-51.10	-51.19	-51.26	-49.83	-49.97				
27	-46.23	-46.31	-47.87	-47.90	-48.48	-48.59	-50.44	-50.74	-51.09	-51.19	-49.97	-50.16				
28	-46.29	-46.54	-47.90	-48.07	-48.48	-48.57	-50.26	-50.44	-50.89	-51.09	-49.83	-50.16				
29	-46.36	-46.54	-48.07	-48.68	-48.32	-48.51	-50.18	-50.26	-50.73	-50.90	-49.64	-49.83				
30	-46.35	-46.37	-48.64	-48.74	-48.18	-48.32	-50.16	-50.20	-50.54	-50.74	-49.15	-49.64				
31	---	---	-48.45	-48.64	---	---	-50.11	-50.17	-50.45	-50.60	---	---				
MONTH	-44.19	-46.54	-46.08	-48.74	-47.88	-48.73	-48.12	-51.51	-50.12	-52.00	-48.09	-50.63				
YEAR	-44.19	-52.00														

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

PRINCE GEORGES COUNTY—Continued

WELL NUMBER.--PG Hf 42. SITE ID.--383348076411303. PERMIT NUMBER.--PG-73-0294.

LOCATION.--Lat 38°33'48", long 76°41'13", Hydrologic Unit 02060006, at Chalk Point Power Plant, 0.4 mi. south of Eagle Harbor. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 386 ft; casing diameter 6 in., to 150 ft; casing diameter 4 in., from 150 to 366 ft, and 376 to 386 ft; screen diameter 4 in., from 366 to 376 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Periodic water level measurements from January 1975 to October 1999. Equipped with graphic water-level recorder from January 1975 to July 1976. Equipped with digital water-level recorder--60-minute recorder interval from July 1976 to September 1999.

DATUM.--Elevation of land surface is 27.76 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.71 ft above land surface.

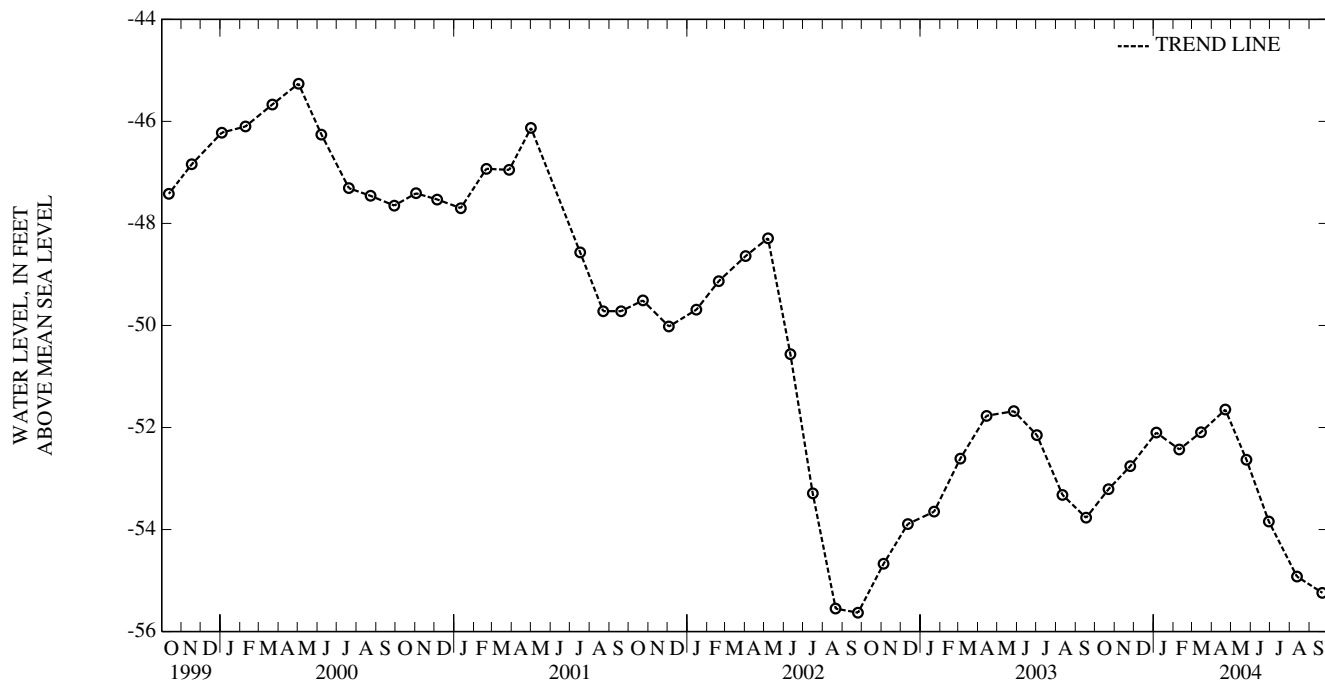
REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.84 ft above sea level, April 22, 1975; lowest measured, 55.63 ft below sea level, September 25, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2003	-53.21	FEB 10, 2004	-52.43	MAY 25, 2004	-52.63	SEP 21, 2004	-55.24
NOV 25	-52.76	MAR 15	-52.09	JUN 29	-53.84		
JAN 05, 2004	-52.10	APR 22	-51.65	AUG 12	-54.92		
	LOWEST -55.24	SEP 21, 2004					
	HIGHEST -51.65	APR 22, 2004					



PRINCE GEORGES COUNTY—Continued

WELL NUMBER.--PG Hf 44. SITE ID.--383250076405304. PERMIT NUMBER.--PG-73-0065.

LOCATION.--Lat 38°32'50", long 76°40'53", Hydrologic Unit 02060006, at Chalk Point Power Plant, on east side of canal. Owner: Mirant Corp.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,545 ft; casing diameter 3 in., to 1,025 ft; screen diameter 3 in., from 1,025 to 1,030 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from June 1995 to June 2004.

DATUM.--Elevation of land surface is 10.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 5.10 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. This well has a 1 in. diameter well inside the 3 in. casing, separated by a packer and screened in the Lower Patapsco Formation as well PG Hf 32.

PERIOD OF RECORD.--June 1973, July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.85 ft above sea level, June 24, 1973; lowest measured, 61.60 ft below sea level, January 23 and 24, 2004 (recorder).

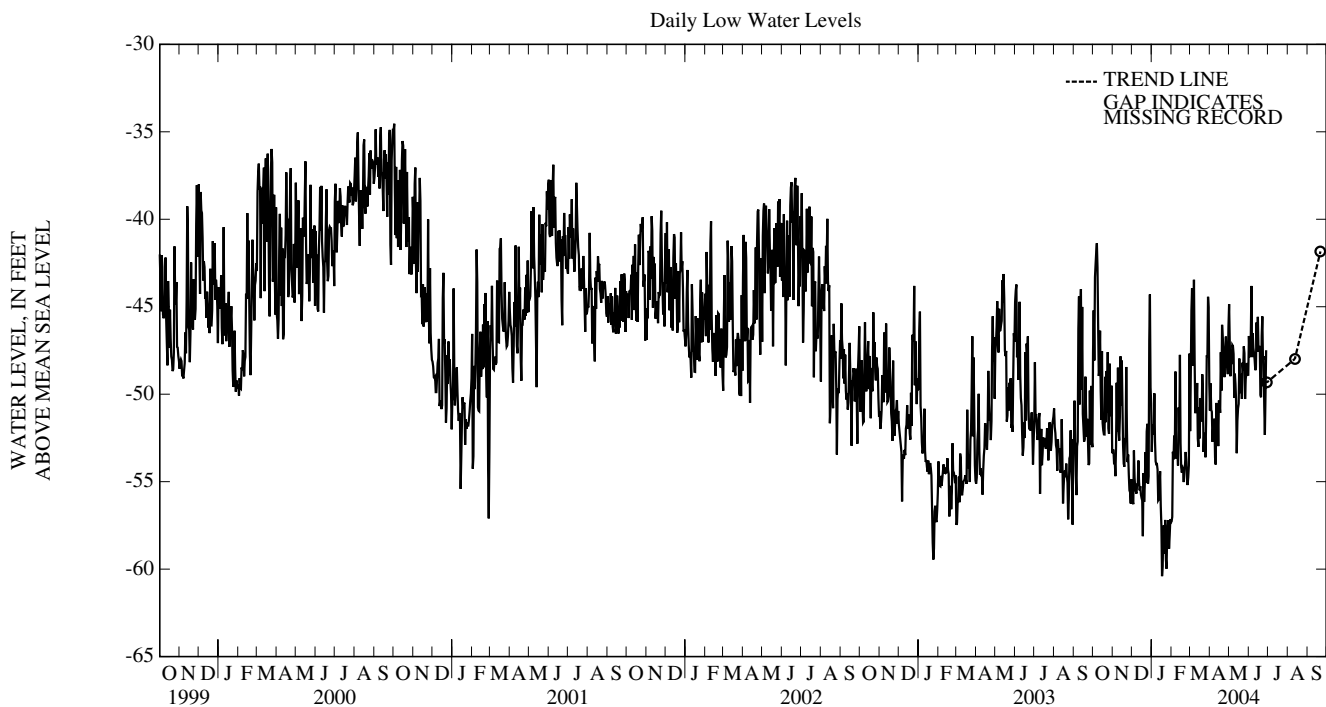
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2003	-46.11	FEB 10, 2004	-51.31	MAY 25, 2004	-48.33	SEP 21, 2004	-41.84
NOV 25	-49.85	MAR 15	-49.43	JUN 29	-49.33		
JAN 05, 2004	-49.32	APR 22	-47.82	AUG 12	-47.98		
LOWEST -51.31 FEB 10, 2004							
HIGHEST -41.84 SEP 21, 2004							

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-45.2	-53.0	-49.3	-54.6	-55.6	-56.4	-52.5	-53.9	-56.6	-57.7	-47.8	-53.5
2	-44.1	-48.5	-50.8	-54.2	-55.5	-56.5	-47.3	-53.5	-54.4	-57.6	-46.0	-53.9
3	-44.2	-51.1	-53.1	-54.5	-55.5	-56.6	-48.4	-52.9	-49.7	-56.0	-44.1	-46.0
4	-42.6	-44.2	-52.9	-54.6	-49.4	-56.0	-50.8	-53.2	-49.5	-55.9	-43.3	-44.8
5	-41.9	-43.0	-54.4	-54.9	-53.7	-55.3	-46.9	-51.9	-48.4	-55.3	-43.0	-50.8
6	-41.4	-42.2	-49.0	-55.1	-54.8	-56.0	-51.4	-53.6	-49.2	-55.6	-44.4	-51.0
7	-41.0	-41.8	-46.9	-52.1	-54.7	-56.2	-53.0	-54.5	-46.2	-52.0	-42.7	-44.7
8	-40.8	-46.8	-49.5	-53.9	-55.2	-56.2	-53.4	-54.9	-52.0	-54.7	-42.3	-51.1
9	-43.0	-49.5	-45.9	-51.1	-54.2	-55.7	-53.5	-54.5	-51.7	-54.8	-49.4	-52.3
10	-46.9	-50.5	-50.2	-53.4	-54.3	-55.5	-53.7	-54.9	-50.2	-54.9	-46.4	-52.9
11	-46.1	-50.9	-52.0	-53.4	-51.1	-55.3	-54.3	-57.6	-53.4	-54.6	-46.5	-52.2
12	-43.9	-50.5	-47.2	-53.1	-53.7	-55.8	-55.0	-57.9	-47.7	-54.5	-46.2	-52.3
13	-46.9	-52.0	-45.6	-52.2	-54.4	-56.0	-54.6	-55.9	-48.1	-54.3	-49.6	-54.5
14	-49.4	-52.3	-46.0	-53.9	-54.3	-55.8	-52.5	-55.7	-45.9	-51.0	-51.2	-53.6
15	-45.3	-50.8	-44.8	-52.0	-54.8	-56.2	-53.6	-58.1	-50.7	-53.7	-47.4	-53.7
16	-50.6	-53.0	-47.0	-52.8	-55.2	-56.5	-56.2	-59.6	-53.2	-54.8	-49.2	-53.7
17	-48.6	-53.8	-51.5	-53.6	-51.7	-58.6	-59.4	-61.0	-53.8	-55.0	-47.0	-52.7
18	-50.1	-53.5	-53.2	-54.3	-56.5	-59.7	-58.3	-61.2	-52.4	-55.1	-46.5	-53.7
19	-49.9	-53.3	-53.9	-54.5	-50.6	-57.4	-57.0	-58.6	-53.4	-55.1	-46.3	-53.8
20	-45.8	-53.6	-49.3	-54.9	-55.2	-56.7	-56.8	-58.6	-54.2	-55.7	-45.2	-53.5
21	-48.9	-53.1	-48.9	-54.2	-51.3	-56.8	-57.7	-60.5	-53.1	-54.9	-45.1	-53.2
22	-45.9	-51.0	-46.3	-52.0	-51.6	-55.3	-56.3	-57.8	-49.9	-55.5	-51.9	-54.3
23	-47.5	-52.5	-48.1	-53.3	-53.6	-56.0	-56.5	-61.6	-49.4	-54.9	-48.5	-54.7
24	-45.3	-51.1	-53.2	-54.6	-49.8	-54.0	-58.5	-61.6	-51.2	-54.9	-49.1	-54.2
25	-50.5	-53.1	-49.9	-54.9	-47.5	-54.7	-57.4	-59.2	-53.7	-55.5	-51.6	-54.4
26	-49.5	-53.6	-53.4	-55.4	-54.1	-55.7	-56.9	-58.1	-54.6	-55.6	-47.4	-54.4
27	-46.4	-51.7	-55.2	-55.9	-50.0	-56.2	-56.7	-58.9	-53.1	-55.5	-45.7	-51.3
28	-47.8	-53.1	-55.3	-55.9	-45.2	-50.0	-57.5	-59.9	-50.1	-55.5	-45.2	-51.9
29	-48.0	-52.6	-55.4	-56.8	-43.5	-45.3	-56.9	-59.0	-46.4	-50.6	-43.7	-46.0
30	-46.5	-52.0	-51.9	-56.1	-43.9	-52.0	-56.6	-57.6	---	---	-43.3	-49.4
31	-52.0	-54.0	---	---	-47.4	-53.1	-56.9	-57.6	---	---	-45.9	-51.3
MONTH	-40.8	-54.0	-44.8	-56.8	-43.5	-59.7	-46.9	-61.6	-45.9	-57.7	-42.3	-54.7

PRINCE GEORGES COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-48.3	-52.2	-43.6	-46.5	-45.1	-48.1	---	---	---	---	---	---
2	-46.7	-52.3	-45.5	-47.8	-45.0	-49.8	---	---	---	---	---	---
3	-47.5	-52.6	-46.5	-50.7	-44.7	-48.5	---	---	---	---	---	---
4	-48.0	-53.1	-44.7	-50.7	-44.6	-48.3	---	---	---	---	---	---
5	-50.1	-54.0	-47.6	-49.0	-42.2	-46.0	---	---	---	---	---	---
6	-48.7	-53.8	-44.9	-48.5	-46.0	-49.0	---	---	---	---	---	---
7	-50.9	-53.5	-45.1	-48.7	-44.1	-49.1	---	---	---	---	---	---
8	-48.7	-53.7	-44.7	-51.0	-46.2	-48.1	---	---	---	---	---	---
9	-52.4	-54.1	-48.1	-52.0	-46.3	-48.4	---	---	---	---	---	---
10	-53.3	-54.9	-46.7	-50.2	-46.6	-48.6	---	---	---	---	---	---
11	-47.1	-55.0	-48.0	-50.3	-47.0	-50.6	---	---	---	---	---	---
12	-47.6	-53.6	-49.4	-52.0	-44.9	-51.5	---	---	---	---	---	---
13	-47.5	-53.8	-52.0	-54.3	-44.2	-47.5	---	---	---	---	---	---
14	-50.5	-54.2	-50.6	-52.3	-45.4	-48.3	---	---	---	---	---	---
15	-47.0	-54.6	-50.5	-51.5	-44.0	-47.5	---	---	---	---	---	---
16	-46.8	-52.2	-49.0	-51.0	-46.4	-48.1	---	---	---	---	---	---
17	-47.2	-53.3	-46.3	-49.5	-46.8	-48.2	---	---	---	---	---	---
18	-45.6	-51.0	-47.1	-51.1	-46.0	-48.3	---	---	---	---	---	---
19	-45.5	-52.6	-46.4	-50.1	-48.2	-51.5	---	---	---	---	---	---
20	-44.5	-47.9	-46.2	-51.3	-49.2	-51.6	---	---	---	---	---	---
21	-44.4	-48.6	-48.7	-51.4	-44.7	-49.6	---	---	---	---	---	---
22	-46.0	-48.5	-45.7	-50.4	-43.5	-47.9	---	---	---	---	---	---
23	-47.9	-49.9	-47.4	-49.7	-47.0	-48.6	---	---	---	---	---	---
24	-46.0	-50.8	-44.1	-49.7	-45.3	-49.9	---	---	---	---	---	---
25	-45.1	-49.2	-44.2	-50.2	-49.0	-52.7	---	---	---	---	---	---
26	-44.0	-49.5	-49.3	-50.8	-50.8	-53.8	---	---	---	---	---	---
27	-46.7	-49.8	-48.2	-50.0	-47.2	-51.9	---	---	---	---	---	---
28	-45.0	-50.7	-48.4	-49.1	-46.0	-49.2	---	---	---	---	---	---
29	-47.4	-49.5	-45.4	-51.0	---	---	---	---	---	---	---	---
30	-44.1	-50.1	-45.4	-50.5	---	---	---	---	---	---	---	---
31	---	---	-45.8	-51.2	---	---	---	---	---	---	---	---
MONTH	-44.0	-55.0	-43.6	-54.3	-42.2	-53.8	---	---	---	---	---	---
YEAR	-40.8	-61.6										



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY

WELL NUMBER.--QA Be 15. SITE ID.--391203076024301. PERMIT NUMBER.--QA-70-0130.

LOCATION.--Lat 39°12'03", long 76°02'43", Hydrologic Unit 02060002, at Kingstown off MD Rt. 213. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,171 ft; casing diameter 4 in., to 1,161 ft; screen diameter 4 in., from 1,161 to 1,171 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from February 1988 to April 1991.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.52 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

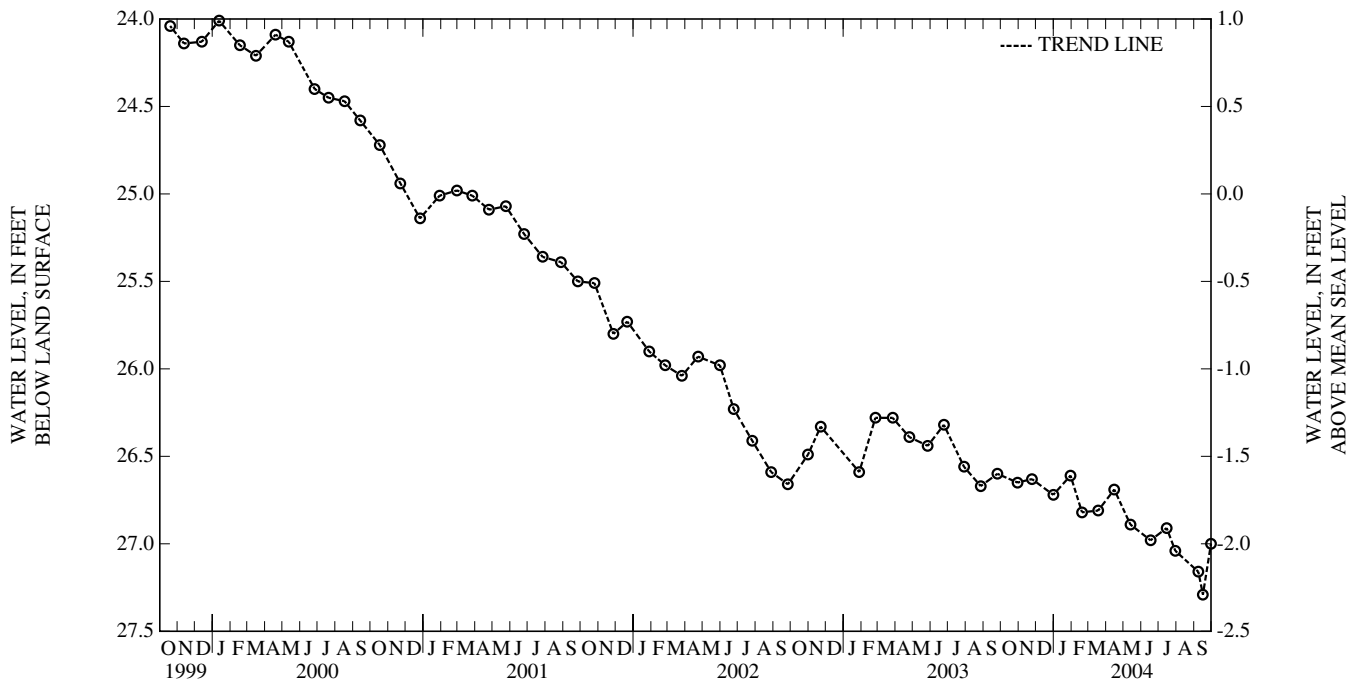
PERIOD OF RECORD.--March 1971 to October 1972, July 1977 to December 1978, March 1981 to September 1982, and October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.52 ft below land surface, October 10, 1971; lowest measured, 27.29 ft below land surface, September 16, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	26.65	FEB 19, 2004	26.82	JUN 17, 2004	26.98	SEP 16, 2004	27.29
NOV 24	26.63	MAR 18	26.81	JUL 15	26.91	30	27.00
DEC 31	26.72	APR 15	26.69	30	27.04		
JAN 30, 2004	26.61	MAY 13	26.89	SEP 08	27.16		

HIGHEST 26.61 JAN 30, 2004
 LOWEST 27.29 SEP 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Be 16. SITE ID.--391203076024302. PERMIT NUMBER.--QA-70-0130.

LOCATION.--Lat 39°12'03", long 76°02'43", Hydrologic Unit 02060002, at Kingstown off MD Rt. 213. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 495 ft; casing diameter 6 in., to 475 ft; screen diameter 6 in., from 475 to 495 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from February 1988 to April 1991.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.70 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

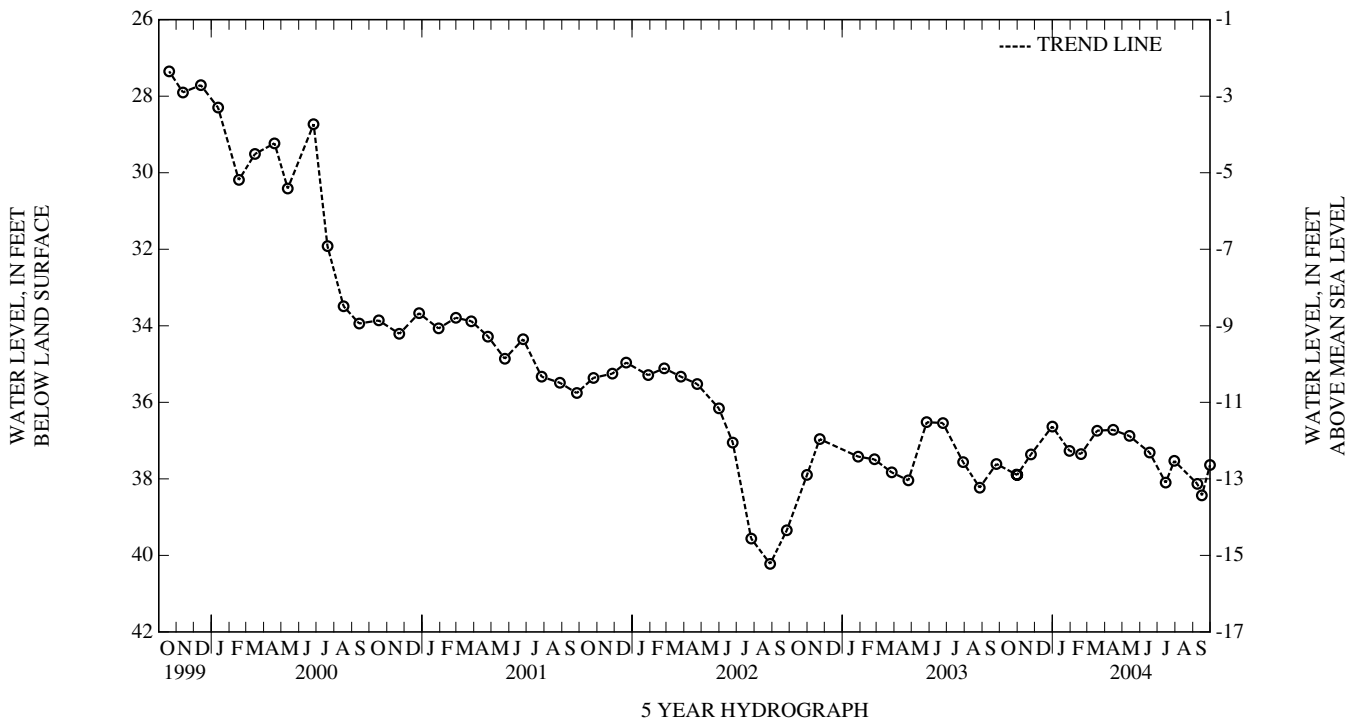
PERIOD OF RECORD.--March 1971 to September 1972, July 1977 to May 1979, January 1981 to September 1982, and October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.41 ft below land surface, September 11, 1971; lowest measured, 40.22 ft below land surface, August 28, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	37.89	JAN 30, 2004	37.27	MAY 13, 2004	36.88	SEP 08, 2004	38.13
31	37.90	FEB 19	37.35	JUN 17	37.31	16	38.43
NOV 24	37.36	MAR 18	36.74	JUL 15	38.10	30	37.64
DEC 31	36.63	APR 15	36.72	30	37.53		

HIGHEST 36.63 DEC 31, 2003
 LOWEST 38.43 SEP 16, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Be 17. SITE ID.--391203076024303.

LOCATION.--Lat 39°12'03", long 76°02'43", Hydrologic Unit 02060002, at Kingstown, off MD Rt. 213. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 120 ft; casing diameter 6 in., to 100 ft; screen diameter 6 in., from 100 to 120 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from February 1988 to April 1991.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

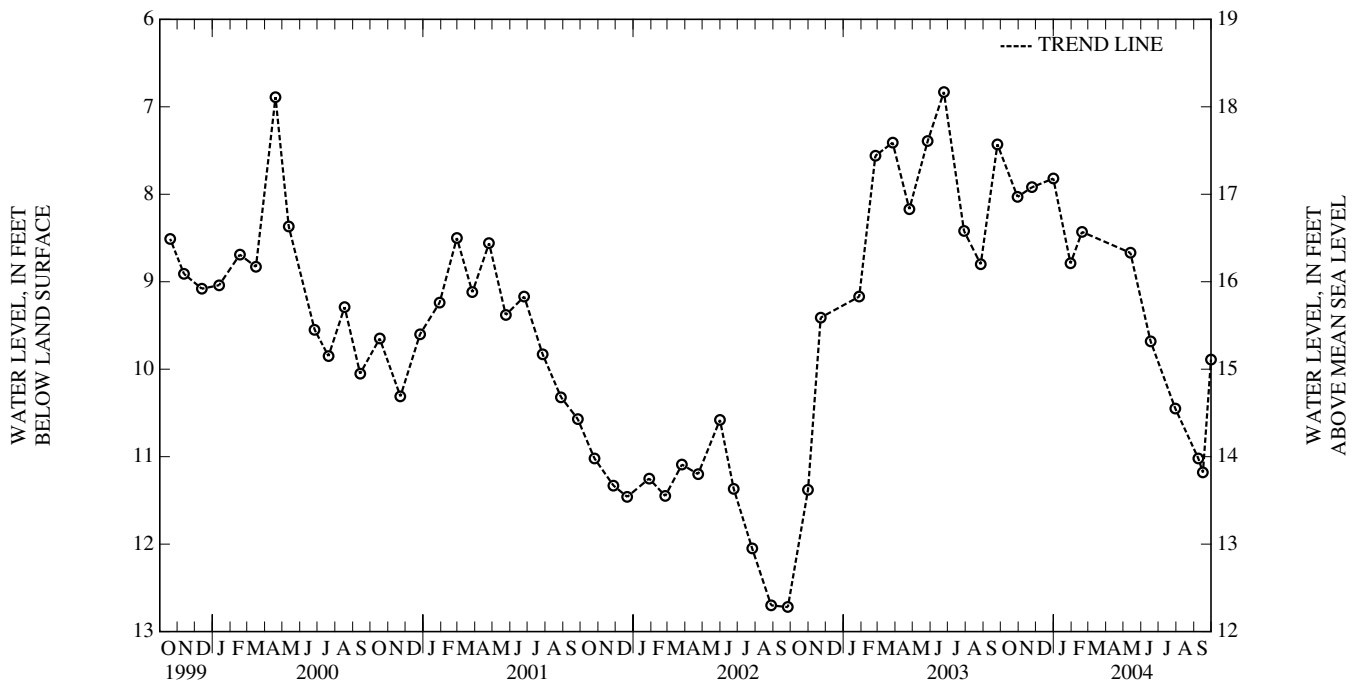
PERIOD OF RECORD.--July 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.83 ft below land surface, June 24, 2003; lowest measured, 13.00 ft below land surface, September 30, 1977.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	8.03	JAN 30, 2004	8.79	JUN 17, 2004	9.68	SEP 16, 2004	11.18
NOV 24	7.92	FEB 19	8.43	JUL 30	10.45	30	9.89
DEC 31	7.82	MAY 13	8.67	SEP 08	11.02		

HIGHEST 7.82 DEC 31, 2003
 LOWEST 11.18 SEP 16, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNE'S COUNTY—Continued

WELL NUMBER.--QA Cg 69. SITE ID.--390839075515001. PERMIT NUMBER.--QA-94-2072.

LOCATION.--Lat 39°08'39", long 75°51'50", Hydrologic Unit 02060002. Owner: Town of Barclay.

AQUIFER.--Pensauken Formation of upper Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Drilled, water table well, depth 69 ft; casing diameter 6 in., to 29 ft; screen diameter 4 in., from 29 to 69 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 65.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of elbow pipe, 2.70 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well.

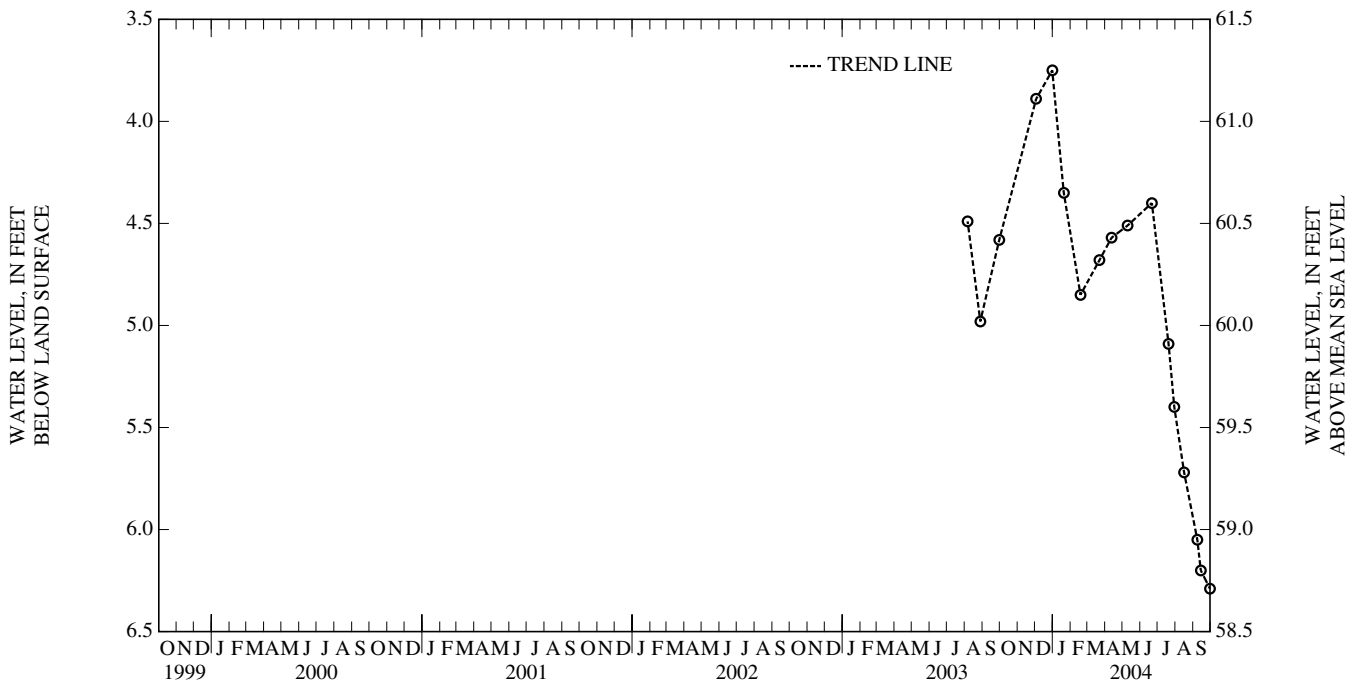
PERIOD OF RECORD.--August 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.75 ft below land surface, December 31, 2003; lowest measured, 6.29 ft below land surface, September 30, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 03, 2003	3.89	MAR 22, 2004	4.68	JUL 20, 2004	5.09	SEP 14, 2004	6.20
31	3.75	APR 12	4.57	30	5.40	30	6.29
JAN 20, 2004	4.35	MAY 10	4.51	AUG 16	5.72		
FEB 18	4.85	JUN 21	4.40	SEP 08	6.05		

HIGHEST 3.75 DEC 31, 2003
 LOWEST 6.29 SEP 30, 2004



5 YEAR HYDROGRAPH
 OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Db 30. SITE ID.--390201076182701. PERMIT NUMBER.--QA-81-0473.

LOCATION.--Lat 39°02'01", long 76°18'27", Hydrologic Unit 02060002, north side of Pier Avenue, 0.5 mi south of Love Point. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well (semi-confined), depth 220 ft; casing diameter 4 in., to 210 ft; screen diameter 4 in., from 210 to 220 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 17.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.40 ft above land surface.

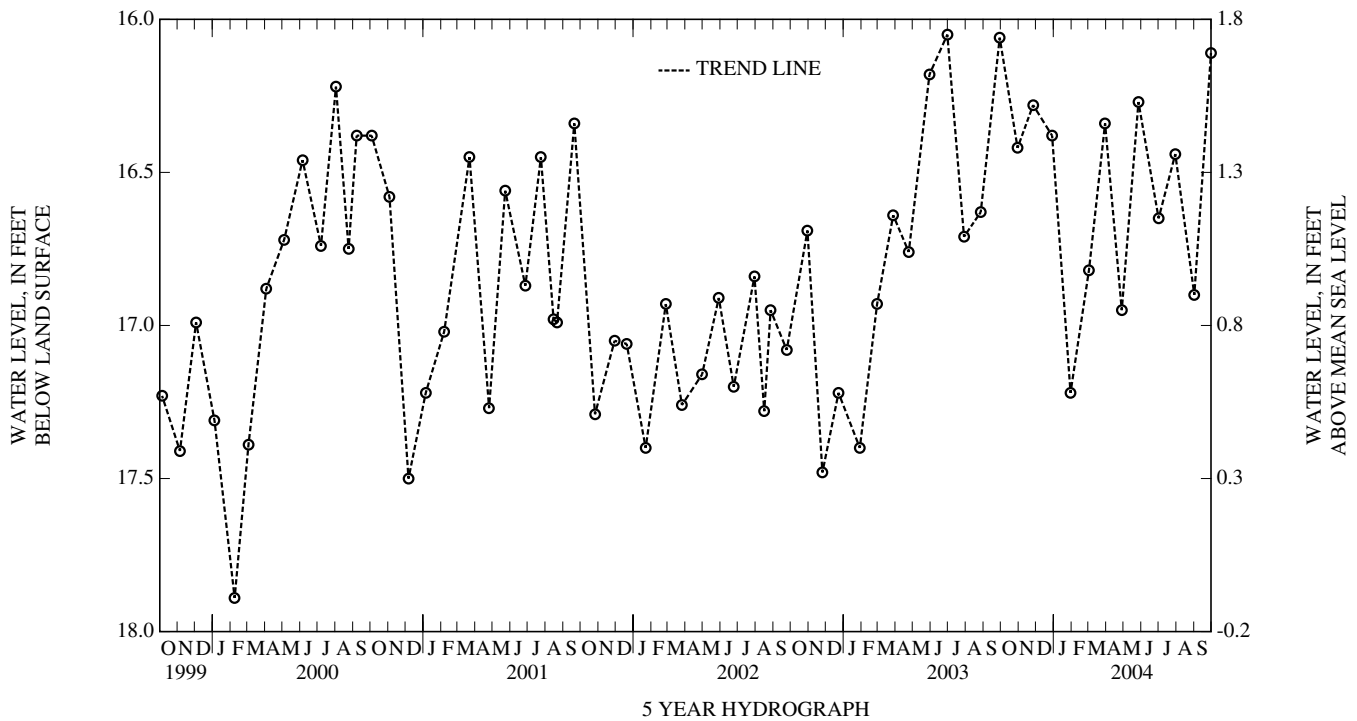
REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.59 ft below land surface, April 9, 1993; lowest measured, 18.37 ft below land surface, March 3, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	16.42	JAN 30, 2004	17.22	APR 28, 2004	16.95	JUL 30, 2004	16.44
NOV 26	16.28	MAR 02	16.82	MAY 27	16.27	SEP 01	16.90
DEC 29	16.38	30	16.34	JUL 01	16.65	30	16.11
HIGHEST 16.11 SEP 30, 2004							
LOWEST 17.22 JAN 30, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Db 32. SITE ID.--390201076182703. PERMIT NUMBER.--QA-81-0473.

LOCATION.--Lat 39°02'01", long 76°18'27", Hydrologic Unit 02060002, north side of Pier Avenue, 0.5 mi south of Love Point. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well (semi-confined), depth 116 ft; casing diameter 4 in., to 106 ft; screen diameter 4 in., from 106 to 116 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from May 1985 to February 1999.

DATUM.--Elevation of land surface is 18.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.10 ft above land surface.

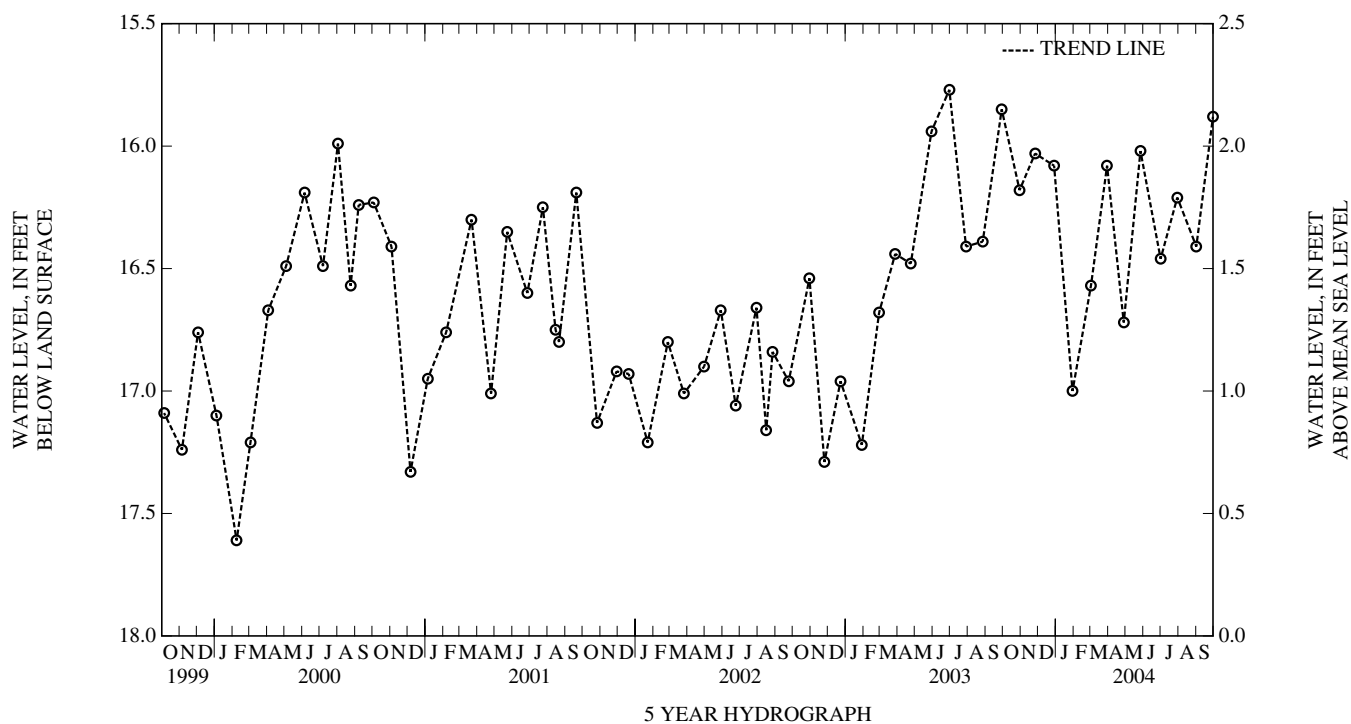
REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--May 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.77 ft below land surface, June 30, 2003; lowest measured, 17.83 ft below land surface, December 8, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	16.18	JAN 30, 2004	17.00	APR 28, 2004	16.72	JUL 30, 2004	16.21
NOV 26	16.03	MAR 02	16.57	MAY 27	16.02	SEP 01	16.41
DEC 29	16.08	30	16.08	JUL 01	16.46	30	15.88
HIGHEST 15.88		SEP 30, 2004					
LOWEST 17.00		JAN 30, 2004					



QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Db 34. SITE ID.--390023076174301. PERMIT NUMBER.--QA-81-0471.

LOCATION.--Lat 39°00'23", long 76°17'43", Hydrologic Unit 02060002, near Cloverfields community park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 180 ft; casing diameter 4 in., to 170 ft; screen diameter 4 in., from 170 to 180 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from April 1985 to February 1999.

DATUM.--Elevation of land surface is 7.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

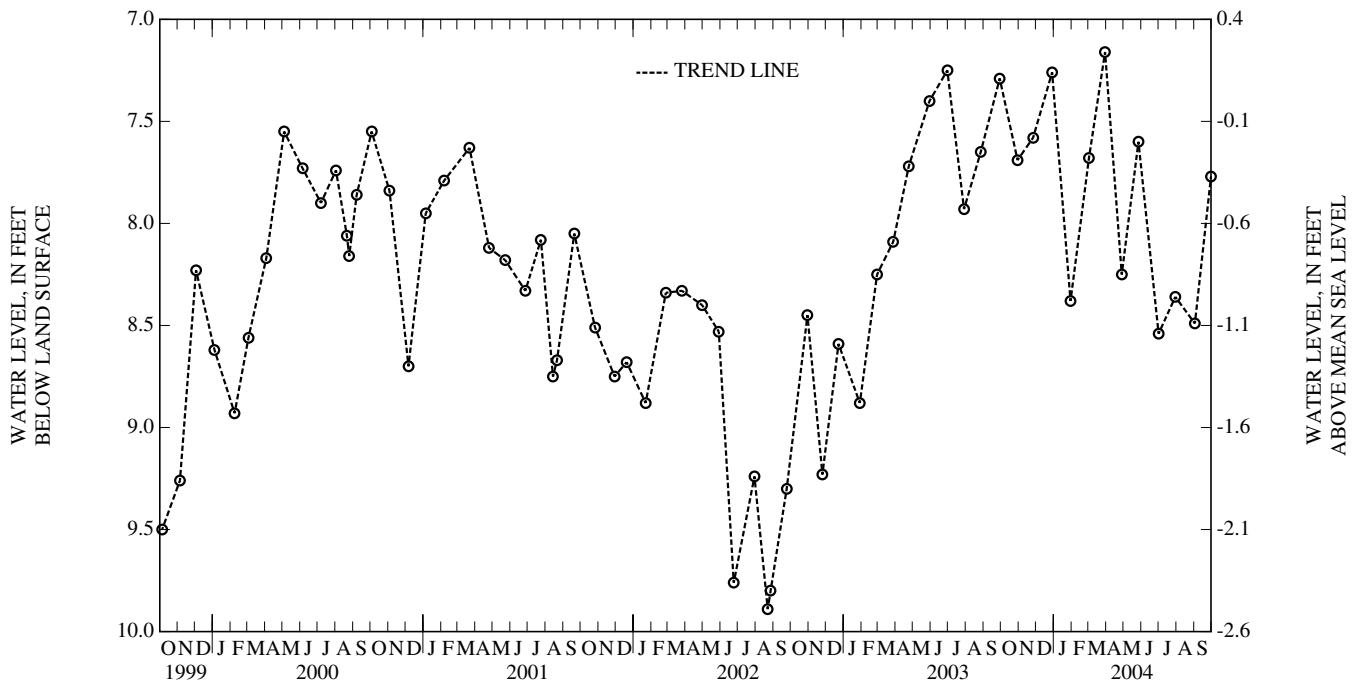
PERIOD OF RECORD.--April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.15 ft below land surface, April 7, 1997; lowest measured, 9.89 ft below land surface, August 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	7.69	JAN 30, 2004	8.38	APR 28, 2004	8.25	JUL 30, 2004	8.36
NOV 26	7.58	MAR 02	7.68	MAY 27	7.60	SEP 02	8.49
DEC 29	7.26	30	7.16	JUL 01	8.54	30	7.77

HIGHEST 7.16 MAR 30, 2004
 LOWEST 8.54 JUL 01, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Db 35. SITE ID.--390119076191001. PERMIT NUMBER.--QA-81-0472.

LOCATION.--Lat 39°01'19", long 76°19'10", Hydrologic Unit 02060002, 0.5 mi west of MD Rt. 18, at Mylander Farms, Kent Island. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 200 ft; casing diameter 4 in., to 190 ft; screen diameter 4 in., from 190 to 200 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from April 1987 to April 1989.

DATUM.--Elevation of land surface is 7.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.20 ft above land surface.

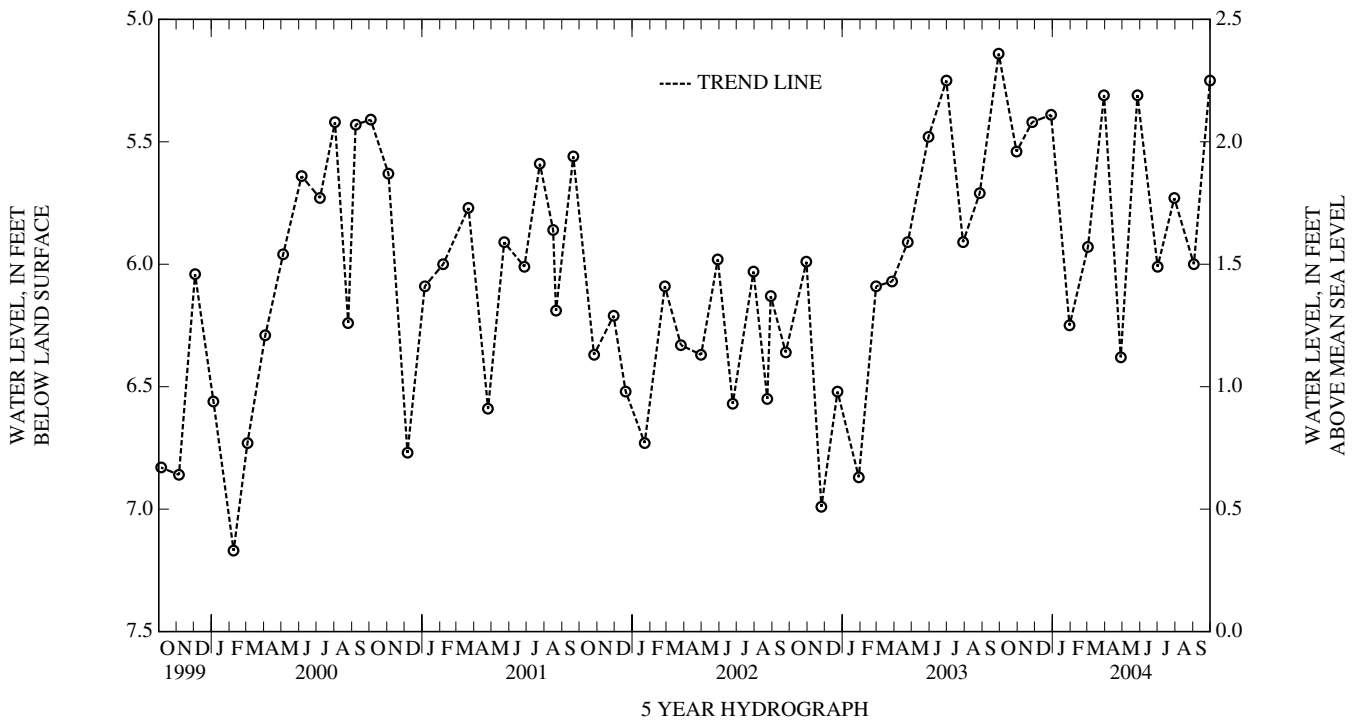
REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--August 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.93 ft below land surface, December 16, 1996; lowest measured, 7.65 ft below land surface, December 8, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	5.54	JAN 30, 2004	6.25	APR 28, 2004	6.38	JUL 30, 2004	5.73
NOV 26	5.42	MAR 02	5.93	MAY 27	5.31	SEP 02	6.00
DEC 29	5.39	30	5.31	JUL 01	6.01	30	5.25
HIGHEST	5.25	SEP 30, 2004					
LOWEST	6.38	APR 28, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Db 37. SITE ID.--390023076174302. PERMIT NUMBER.--QA-81-0471.

LOCATION.--Lat 39°00'23", long 76°17'43", Hydrologic Unit 02060002, near Cloverfield community park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 250 ft; casing diameter 4 in., to 240 ft; screen diameter 4 in., from 240 to 250 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 7.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

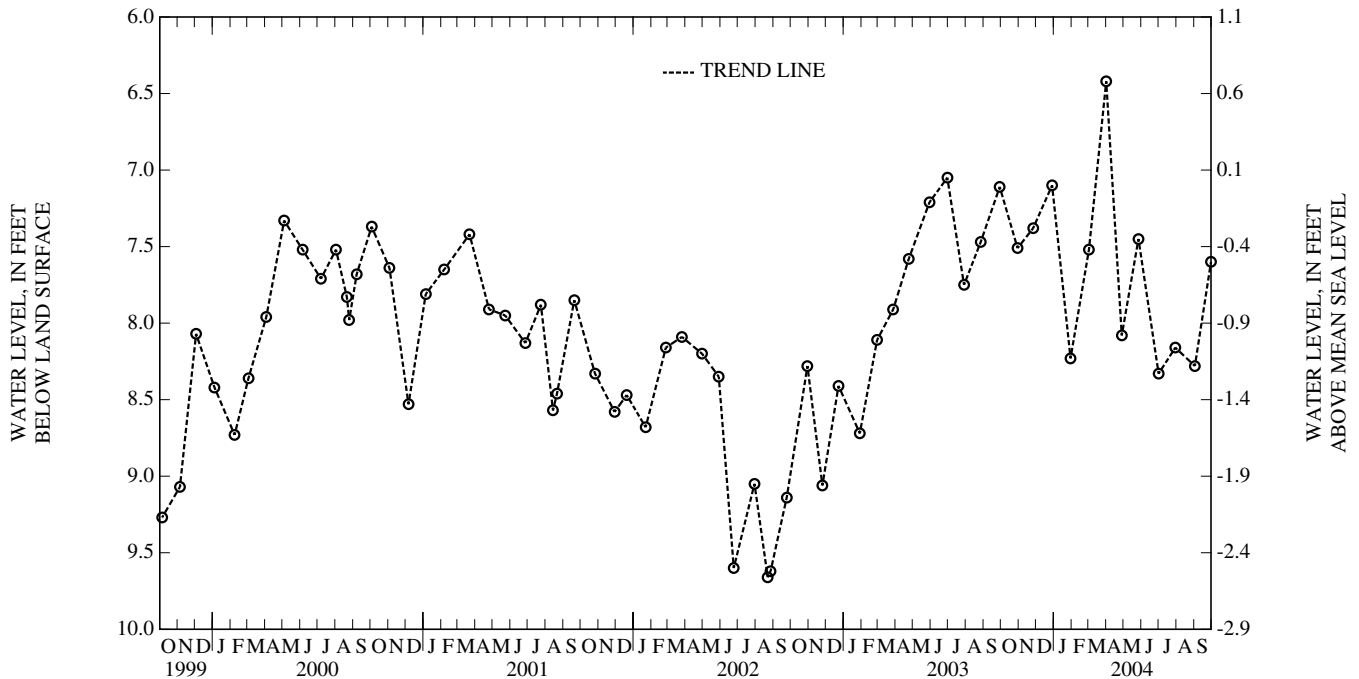
REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.28 ft below land surface, April 9, 1993, and December 16, 1996; lowest measured, 9.74 ft below land surface, January 11, 1994.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	7.51	JAN 30, 2004	8.23	APR 28, 2004	8.08	JUL 30, 2004	8.16
NOV 26	7.38	MAR 02	7.52	MAY 27	7.45	SEP 02	8.28
DEC 29	7.10	APR 01	6.42	JUL 01	8.33	30	7.60
HIGHEST 6.42 APR 01, 2004							
LOWEST 8.33 JUL 01, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA De 27. SITE ID.--390251076034401. PERMIT NUMBER.--QA-94-1853.

LOCATION.--Lat 39°02'51", long 76°03'44", Hydrologic Unit 02060002, at Sheriff's Office, Centreville. Owner: Town of Centreville.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, artesian well, drilled depth 665 ft, measured depth 370 ft; casing diameter 4 in., to 315 ft; screen diameter 4 in., from 315 to 365 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--15-minute recording interval, September 1999 to July 2000.

DATUM.--Elevation of land surface is 10.19 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete base, 1.49 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--September 1999 to current year.

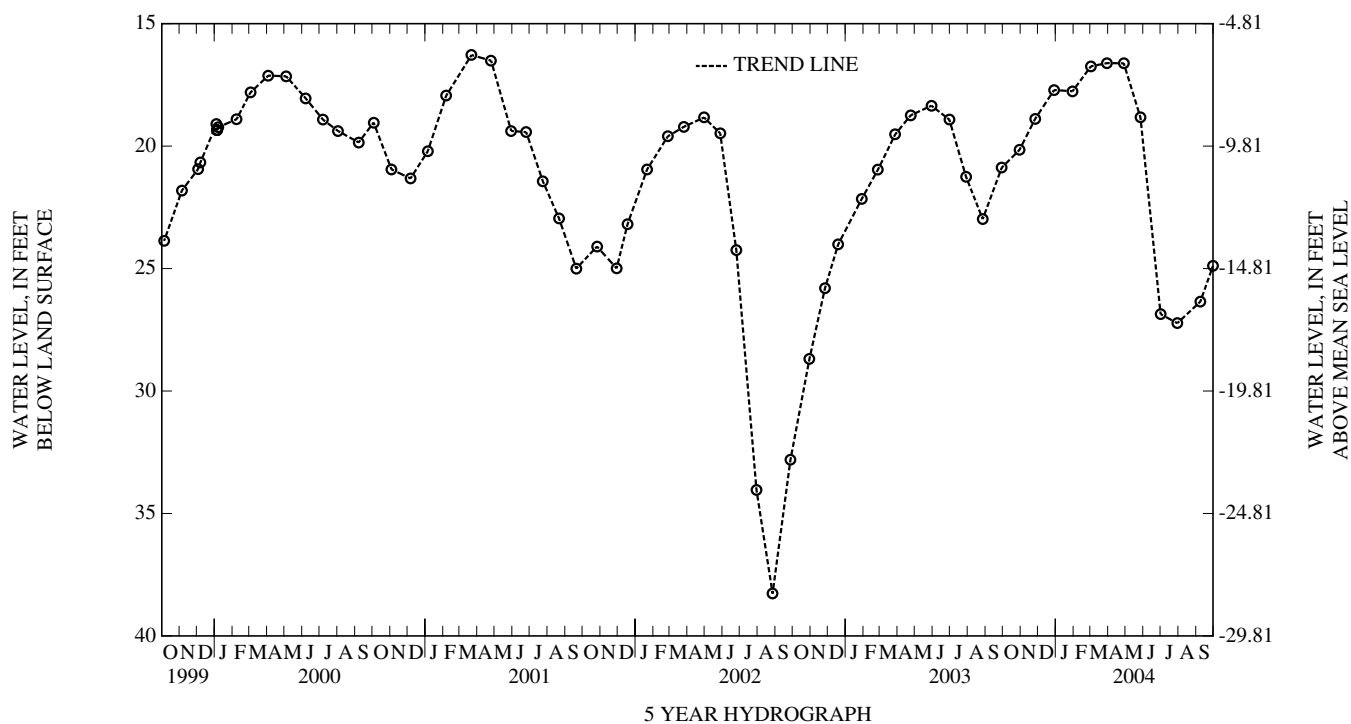
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.28 ft below land surface, March 22, 2001; lowest measured, 38.27 ft below land surface, August 27, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	20.15	JAN 30, 2004	17.76	APR 28, 2004	16.62	JUL 30, 2004	27.23
NOV 26	18.89	MAR 02	16.74	MAY 27	18.83	SEP 08	26.35
DEC 29	17.71	30	16.61	JUL 01	26.86	30	24.89

HIGHEST 16.61 MAR 30, 2004

LOWEST 27.23 JUL 30, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Ea 77. SITE ID.--385718076211501. PERMIT NUMBER.--QA-81-0474.

LOCATION.--Lat 38°57'18", long 76°21'15", Hydrologic Unit 02060002, at Matapeake State Park. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 205 ft; casing diameter 4 in., to 195 ft; screen diameter 4 in., from 195 to 205 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from April 1985 to February 1999.

DATUM.--Elevation of land surface is 10.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.24 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

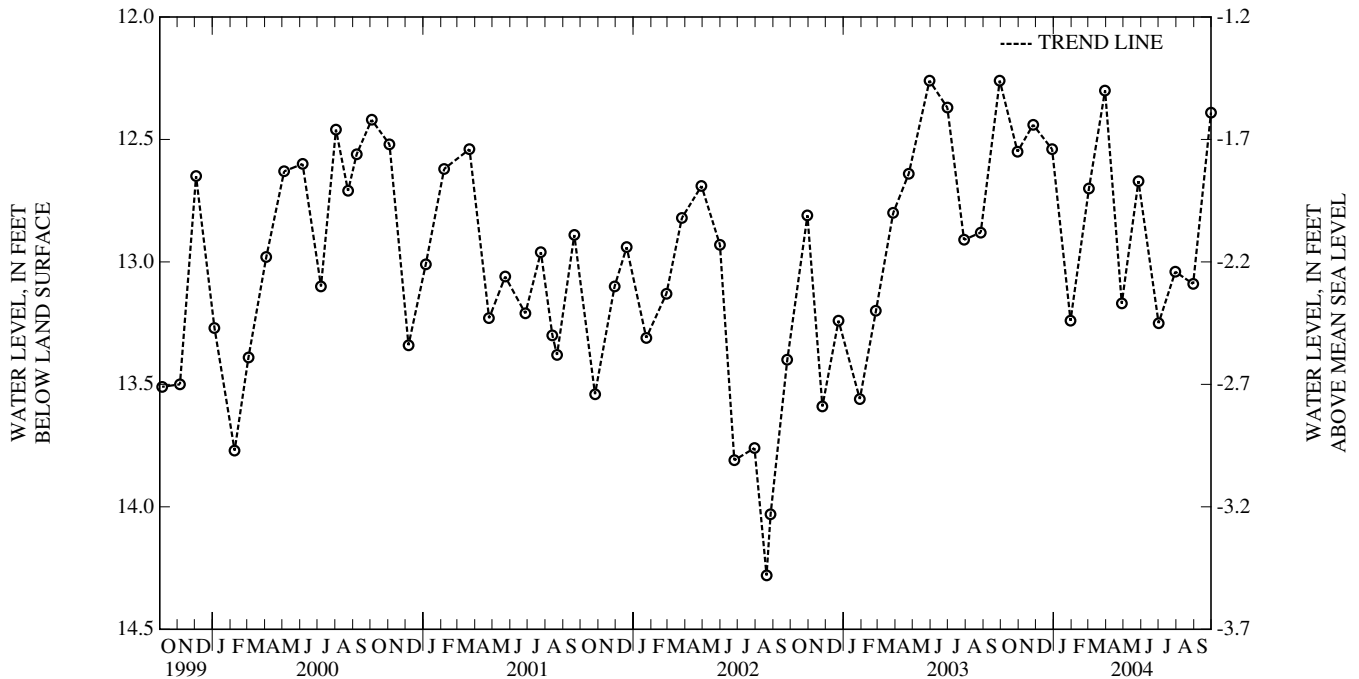
PERIOD OF RECORD.--April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.07 ft below land surface, December 2, 1985; lowest measured, 14.28 ft below land surface, August 20, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	12.55	JAN 30, 2004	13.24	APR 28, 2004	13.17	JUL 30, 2004	13.04
NOV 26	12.44	MAR 02	12.70	MAY 27	12.67	AUG 30	13.09
DEC 29	12.54	MAR 30	12.30	JUL 01	13.25	SEP 30	12.39

HIGHEST 12.30 MAR 30, 2004
 LOWEST 13.25 JUL 01, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Ea 78. SITE ID.--385718076211502 . PERMIT NUMBER.--QA-81-0474.

LOCATION.--Lat 38°57'18", long 76°21'15", Hydrologic Unit 02060002, at Matapeake State Park. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 135 ft; casing diameter 4 in., to 125 ft; screen diameter 4 in., from 125 to 135 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 11.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.91 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

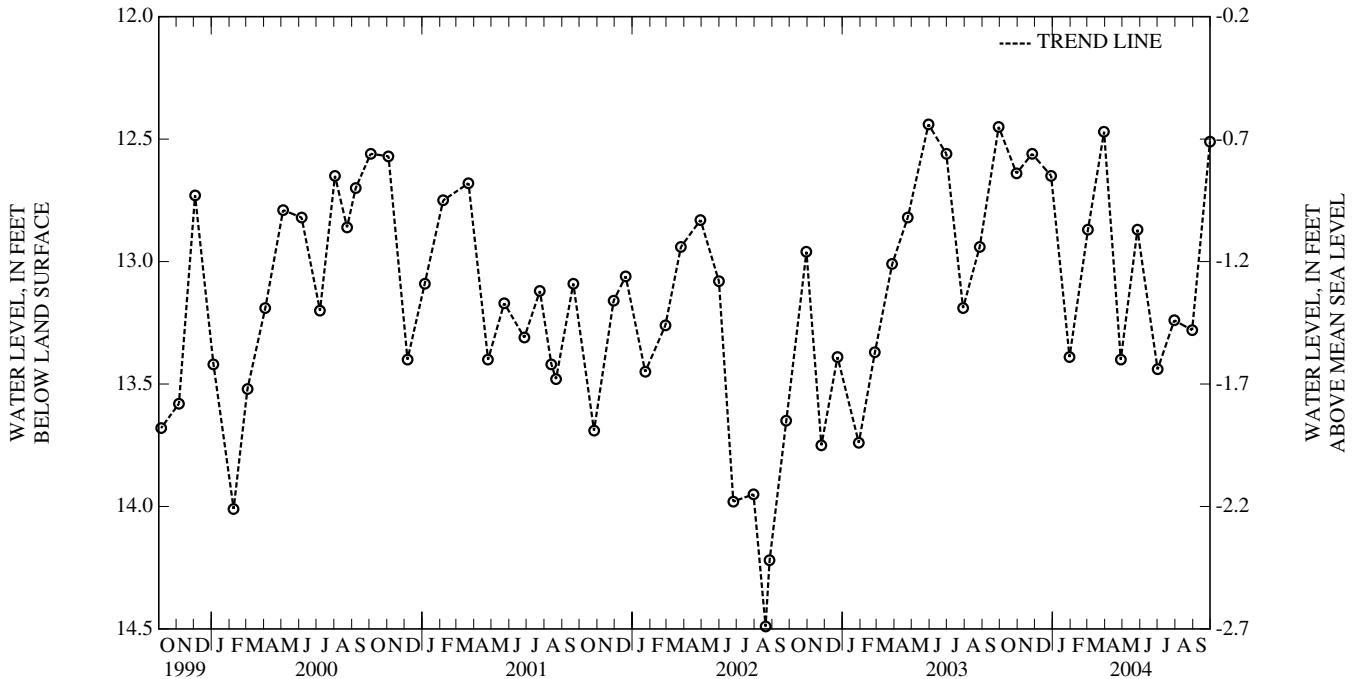
PERIOD OF RECORD.--April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.45 ft below land surface, June 4, 1992; lowest measured, 14.49 ft below land surface, August 20, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	12.64	JAN 30, 2004	13.39	APR 28, 2004	13.40	JUL 30, 2004	13.24
NOV 26	12.56	MAR 02	12.87	MAY 27	12.87	AUG 30	13.28
DEC 29	12.65	30	12.47	JUL 01	13.44	SEP 30	12.51

HIGHEST 12.47 MAR 30, 2004
 LOWEST 13.44 JUL 01, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Ea 79. SITE ID.--385757076200101. PERMIT NUMBER.--QA-81-0469.

LOCATION.--Lat 38°57'57", long 76°20'01", Hydrologic Unit 02060002, at Mowbray Park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 298 ft; casing diameter 4 in., to 288 ft; screen diameter 4 in., from 288 to 298 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Measured twice yearly from October 1986 to April 1989.

DATUM.--Elevation of land surface is 8.30 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.30 ft above land surface.

REMARKS.--Kent Island ground-water monitoring network observation well. Water levels are affected by local ground-water withdrawal.

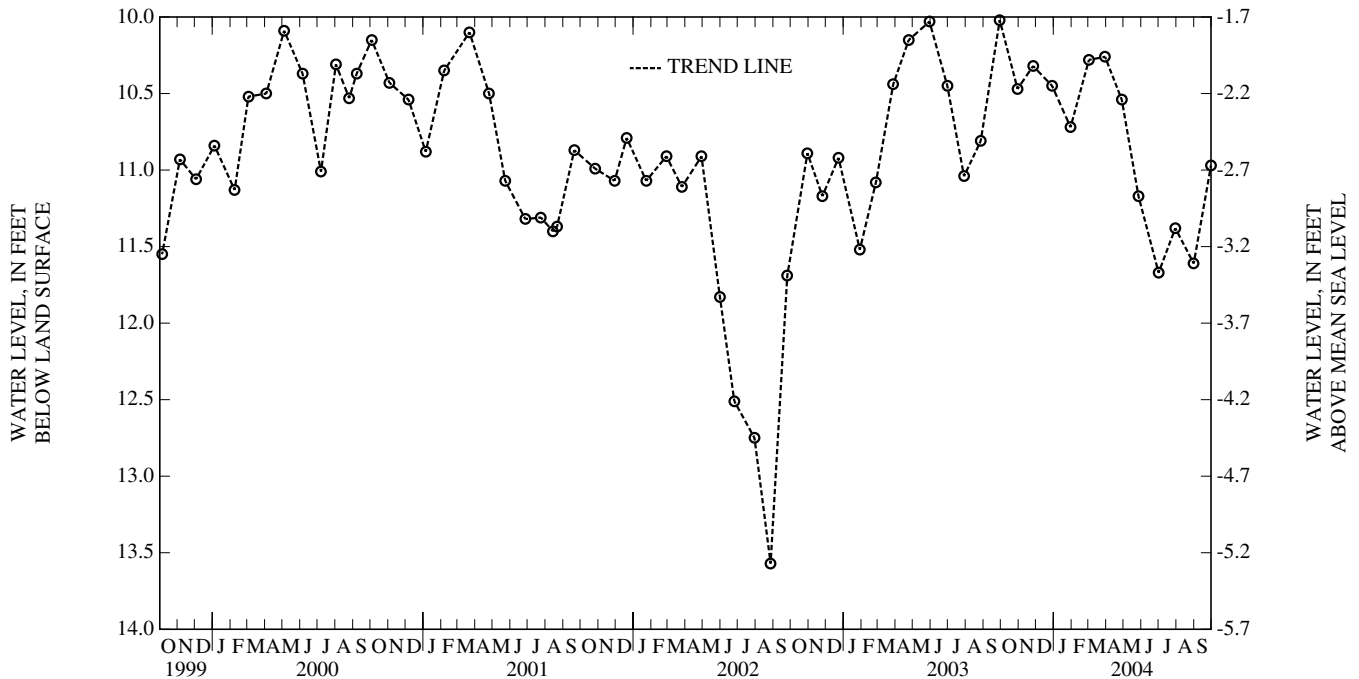
PERIOD OF RECORD.--April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.30 ft below land surface, December 2, 1985; lowest measured, 13.57 ft below land surface, August 27, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	10.47	JAN 30, 2004	10.72	APR 28, 2004	10.54	JUL 30, 2004	11.38
NOV 26	10.32	MAR 02	10.28	MAY 27	11.17	AUG 31	11.61
DEC 29	10.45	MAR 30	10.26	JUL 01	11.67	SEP 30	10.97

HIGHEST 10.26 MAR 30, 2004
 LOWEST 11.67 JUL 01, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Ea 80. SITE ID.--385757076200102. PERMIT NUMBER.--QA-81-0469.

LOCATION.--Lat 38°57'57", long 76°20'01", Hydrologic Unit 02060002, at Mowbray Park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 130 ft; casing diameter 4 in., to 120 ft; screen diameter 4 in., from 120 to 130 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Measured twice yearly from October 1986 to February 1999.

DATUM.--Elevation of land surface is 8.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.51 ft above land surface.

REMARKS.--Kent Island ground-water monitoring network observation well. Water levels are affected by local ground-water withdrawal.

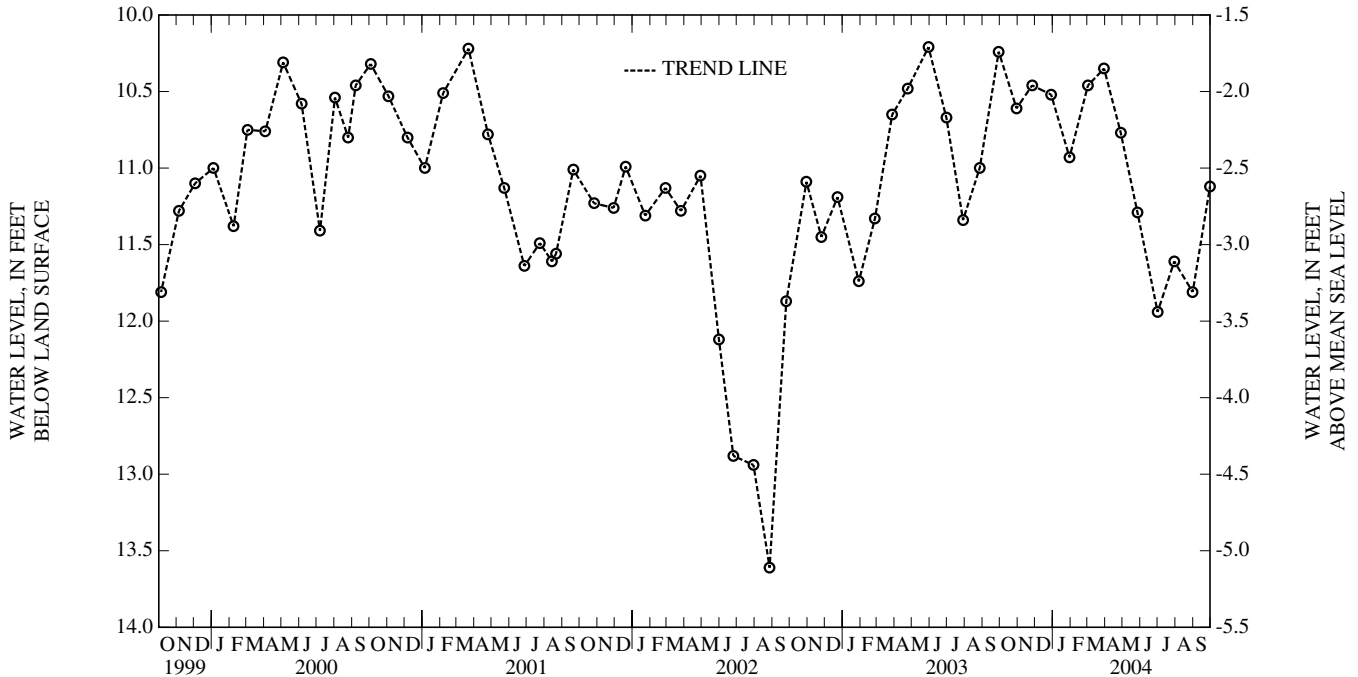
PERIOD OF RECORD.--April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.45 ft below land surface, December 2, 1985; lowest measured, 13.61 ft below land surface, August 27, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	10.61	JAN 30, 2004	10.93	APR 28, 2004	10.77	JUL 30, 2004	11.61
NOV 26	10.46	MAR 02	10.46	MAY 27	11.29	AUG 31	11.81
DEC 29	10.52	MAR 30	10.35	JUL 01	11.94	SEP 30	11.12

HIGHEST 10.35 MAR 30, 2004
 LOWEST 11.94 JUL 01, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Ea 81. SITE ID.--385718076211503. PERMIT NUMBER.--QA-81-0474.

LOCATION.--Lat 38°57'18", long 76°21'15", Hydrologic Unit 02060002, at Matapeake State Park. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 310 ft; casing diameter 4 in., to 300 ft; screen diameter 4 in., from 300 to 310 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 12.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.16 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

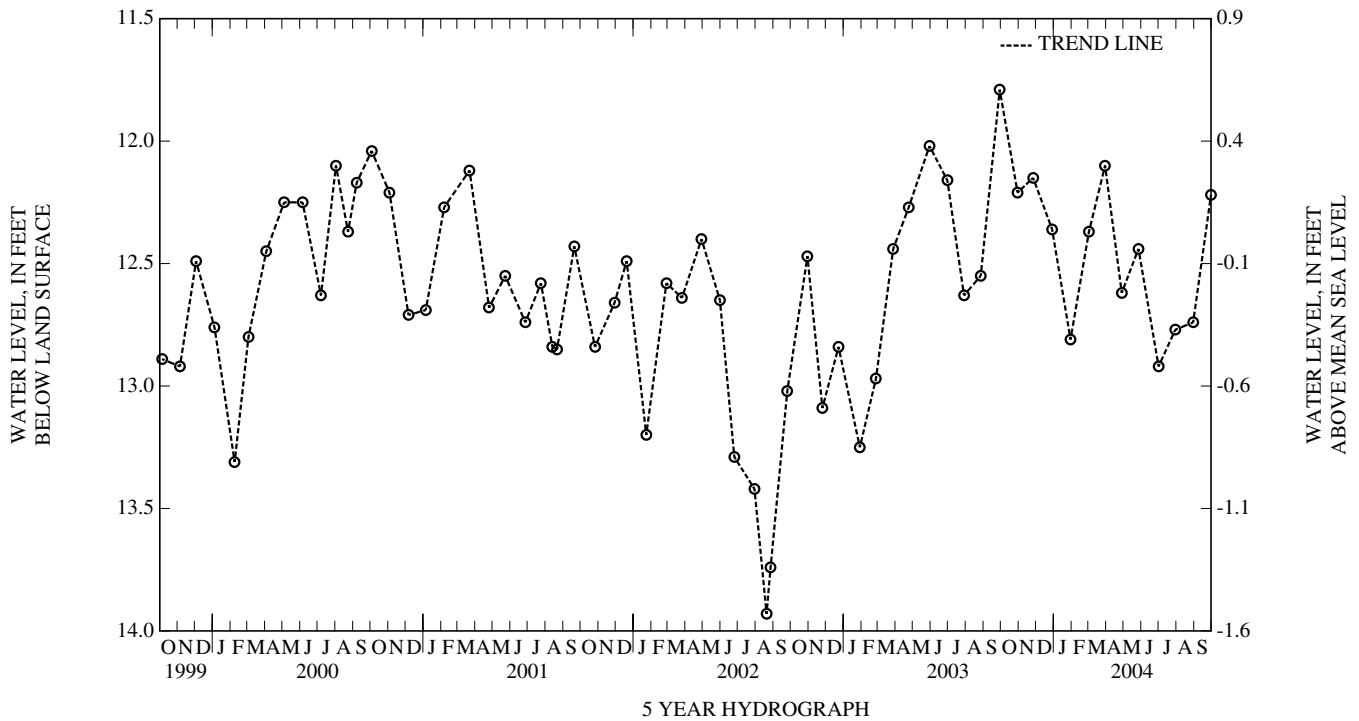
PERIOD OF RECORD.--April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.54 ft below land surface, December 2, 1985; lowest measured, 13.93 ft below land surface, August 20, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	12.21	JAN 30, 2004	12.81	APR 28, 2004	12.62	JUL 30, 2004	12.77
NOV 26	12.15	MAR 02	12.37	MAY 27	12.44	AUG 30	12.74
DEC 29	12.36	30	12.10	JUL 01	12.92	SEP 30	12.22

HIGHEST 12.10 MAR 30, 2004
 LOWEST 12.92 JUL 01, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Eb 110. SITE ID.--385751076171603. PERMIT NUMBER.--QA-73-2979.

LOCATION.--Lat 38°57'51", long 76°17'16", Hydrologic Unit 02060002, near Chester, Kent Island. Owner: U.S. Geological Survey.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 2,485 ft; casing diameter 4 in., to 2,413 ft, 2,423 to 2,465 ft, and 2,475 to 2,485 ft; screen diameter 4 in., from 2,413 to 2,423 ft, and 2,465 to 2,475 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from January 1980 to October 1989.

DATUM.--Elevation of land surface is 13.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.36 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

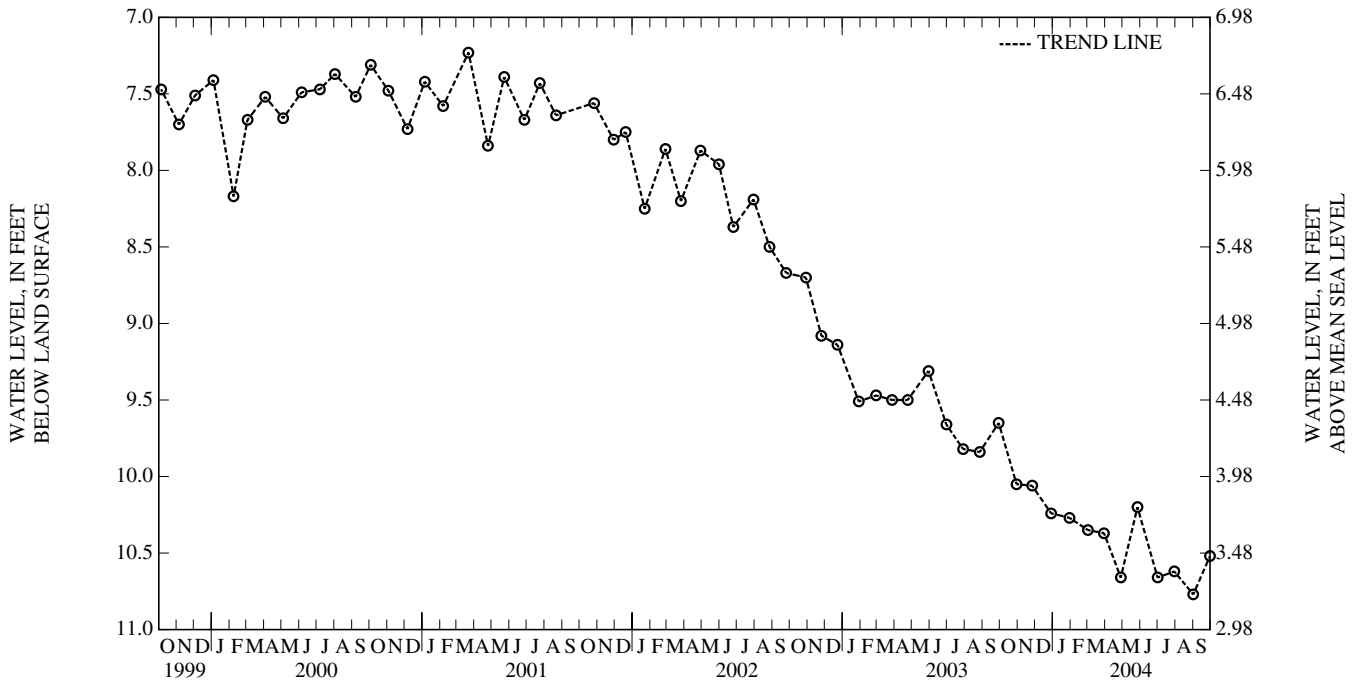
PERIOD OF RECORD.--January 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.99 ft above land surface, January 21, 1980; lowest measured, 10.77 ft below land surface, September 1, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	10.05	JAN 30, 2004	10.27	APR 28, 2004	10.66	JUL 30, 2004	10.62
NOV 26	10.06	MAR 02	10.35	MAY 27	10.20	SEP 01	10.77
DEC 29	10.24	30	10.37	JUL 01	10.66	30	10.52

HIGHEST 10.05 OCT 30, 2003
 LOWEST 10.77 SEP 01, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Eb 111. SITE ID.--385751076171601. PERMIT NUMBER.--QA-73-3122.

LOCATION.--Lat 38°57'51", long 76°17'16", Hydrologic Unit 02060002, near Chester, Kent Island. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 985 ft; casing diameter 4 in., to 955 ft, and 965 to 975 ft; screen diameter 4 in., from 955 to 965 ft, and 975 to 985 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from April 1984 to September 1989.

DATUM.--Elevation of land surface is 14.03 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.41 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

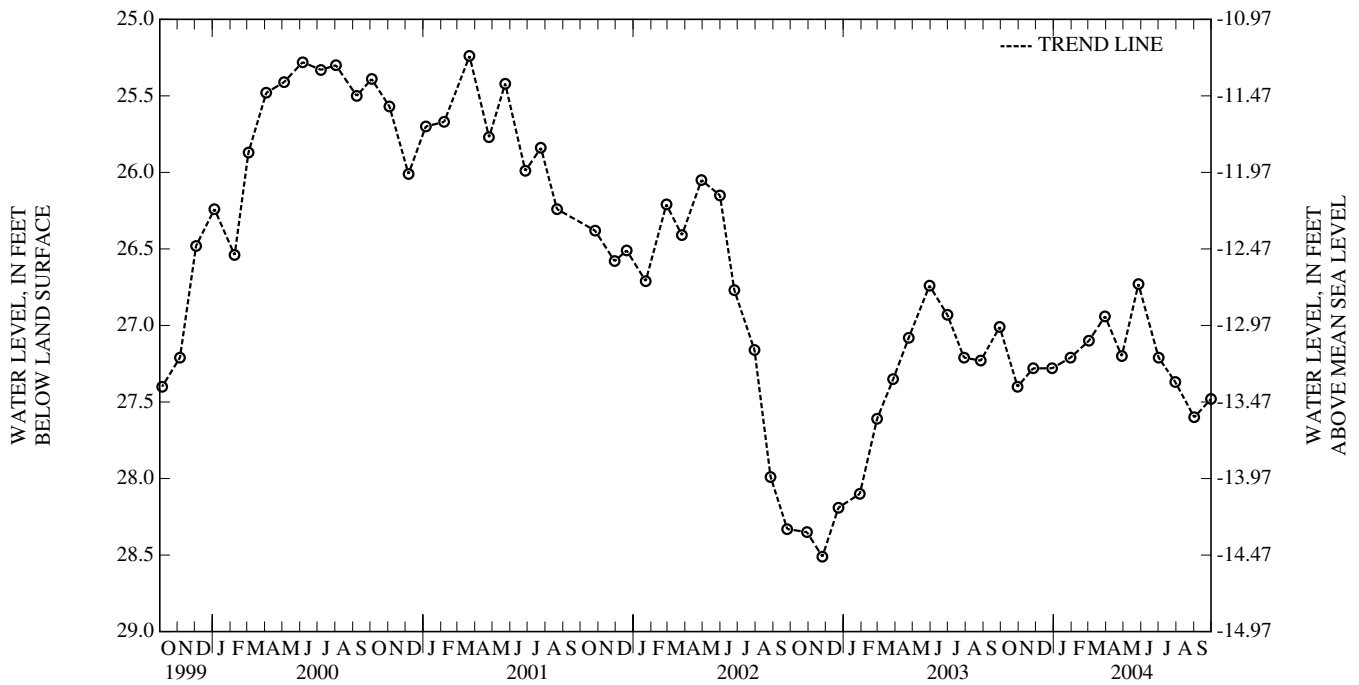
PERIOD OF RECORD.--December 1979 to April 1984, March 1985 to April 1989, and September 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.02 ft below land surface, January 21, 1980; lowest measured, 28.51 ft below land surface, November 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	27.40	JAN 30, 2004	27.21	APR 28, 2004	27.20	JUL 30, 2004	27.37
NOV 26	27.28	MAR 02	27.10	MAY 27	26.73	SEP 01	27.60
DEC 29	27.28	30	26.94	JUL 01	27.21	30	27.48

HIGHEST 26.73 MAY 27, 2004
 LOWEST 27.60 SEP 01, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Eb 112. SITE ID.--385751076171602. PERMIT NUMBER.--QA-73-3123.

LOCATION.--Lat 38°57'51", long 76°17'16", Hydrologic Unit 02060002, near Chester, Kent Island. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,679 ft; casing diameter 4 in., to 1,652 ft, and 1,662 to 1,669 ft; screen diameter 4 in., from 1,652 to 1,662 ft, and 1,669 to 1,679 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from January 1980 to September 1980.

DATUM.--Elevation of land surface is 13.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.36 ft above land surface.

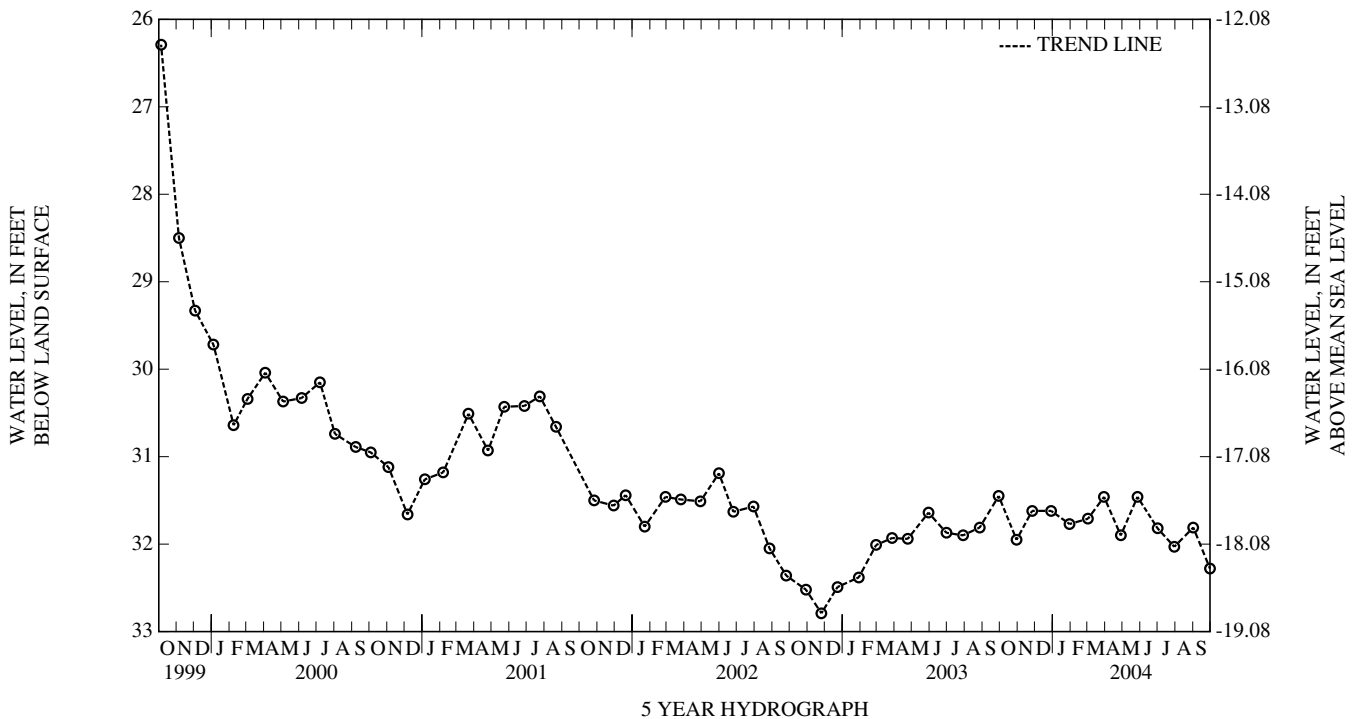
REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawals.

PERIOD OF RECORD.--January 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.69 ft below land surface, January 21, 1980; lowest measured, 32.79 ft below land surface, November 25, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	31.95	JAN 30, 2004	31.77	APR 28, 2004	31.90	JUL 30, 2004	32.03
NOV 26	31.62	MAR 02	31.71	MAY 27	31.46	SEP 01	31.81
DEC 29	31.62	30	31.46	JUL 01	31.82	30	32.28
HIGHEST 31.46 MAR 30, 2004		MAY 27, 2004					
LOWEST 32.28 SEP 30, 2004							



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Eb 113. SITE ID.--385748076172001. PERMIT NUMBER.--QA-73-3172.

LOCATION.--Lat 38°57'48", long 76°17'20", Hydrologic Unit 02060001, near Chester, Kent Island. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 216 ft; casing diameter 6 in., to 176 ft; screen diameter 6 in., from 176 to 216 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with graphic water-level recorder from June 1986 to October 1994.

DATUM.--Elevation of land surface is 11.34 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 1.65 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

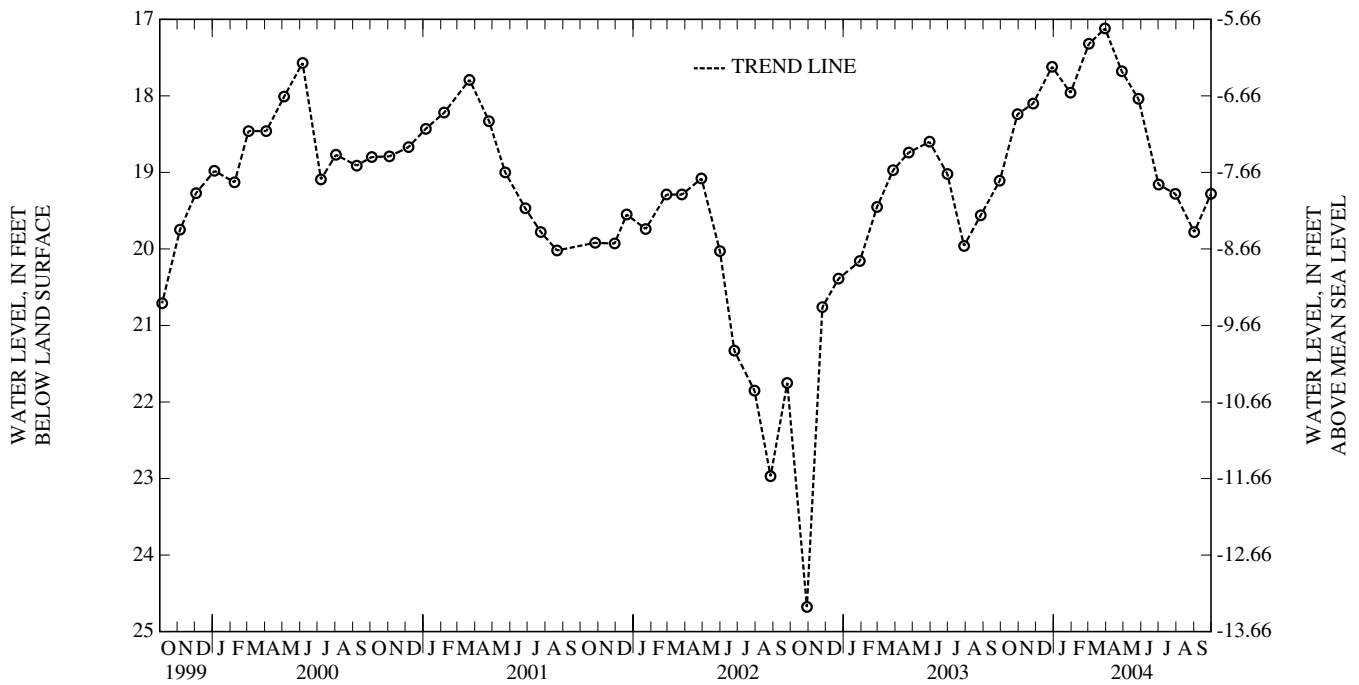
PERIOD OF RECORD.--October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.28 ft below land surface, April 1, 1983; lowest measured, 24.68 ft below land surface, October 29, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	18.24	JAN 30, 2004	17.96	APR 28, 2004	17.68	JUL 30, 2004	19.28
NOV 26	18.10	MAR 02	17.32	MAY 27	18.04	SEP 01	19.78
DEC 29	17.62	30	17.12	JUL 01	19.16	30	19.28

HIGHEST 17.12 MAR 30, 2004
 LOWEST 19.78 SEP 01, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Eb 155. SITE ID.--385843076155302. PERMIT NUMBER.--QA-81-0470.

LOCATION.--Lat 38°58'43", long 76°15'53", Hydrologic Unit 02060002, at north end of Piney Creek Rd., Kent Island. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 245 ft; casing diameter 4 in., to 235 ft; screen diameter 4 in., from 235 to 245 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from June 1986 to April 1989.

DATUM.--Elevation of land surface is 3.90 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

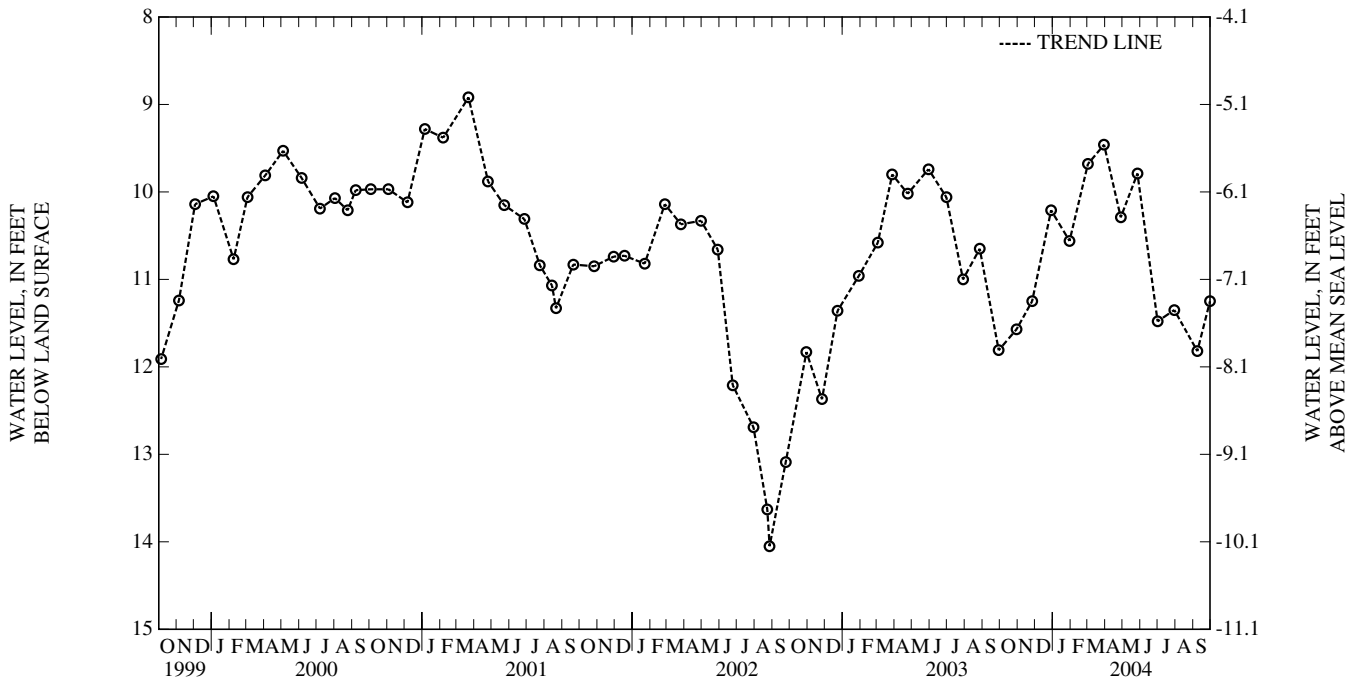
PERIOD OF RECORD.--October 1984, April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.60 ft below land surface, December 2, 1985; lowest measured, 14.05 ft below land surface, August 27, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	11.57	JAN 30, 2004	10.56	APR 28, 2004	10.29	JUL 30, 2004	11.35
NOV 26	11.25	MAR 02	9.68	MAY 27	9.79	SEP 08	11.82
DEC 29	10.21	MAR 30	9.46	JUL 01	11.48	SEP 30	11.25

HIGHEST 9.46 MAR 30, 2004
 LOWEST 11.82 SEP 08, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Eb 156. SITE ID.--385852076195201. PERMIT NUMBER.--QA-81-0475.

LOCATION.--Lat 38°58'52", long 76°19'52", Hydrologic Unit 02060002, north of US Rt. 50, at Terrapin Beach Park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 220 ft; casing diameter 4 in., to 210 ft; screen diameter 4 in., from 210 to 220 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Twice yearly water level measurements from September 1987 to April 1989.

DATUM.--Elevation of land surface is 12.01 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.20 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

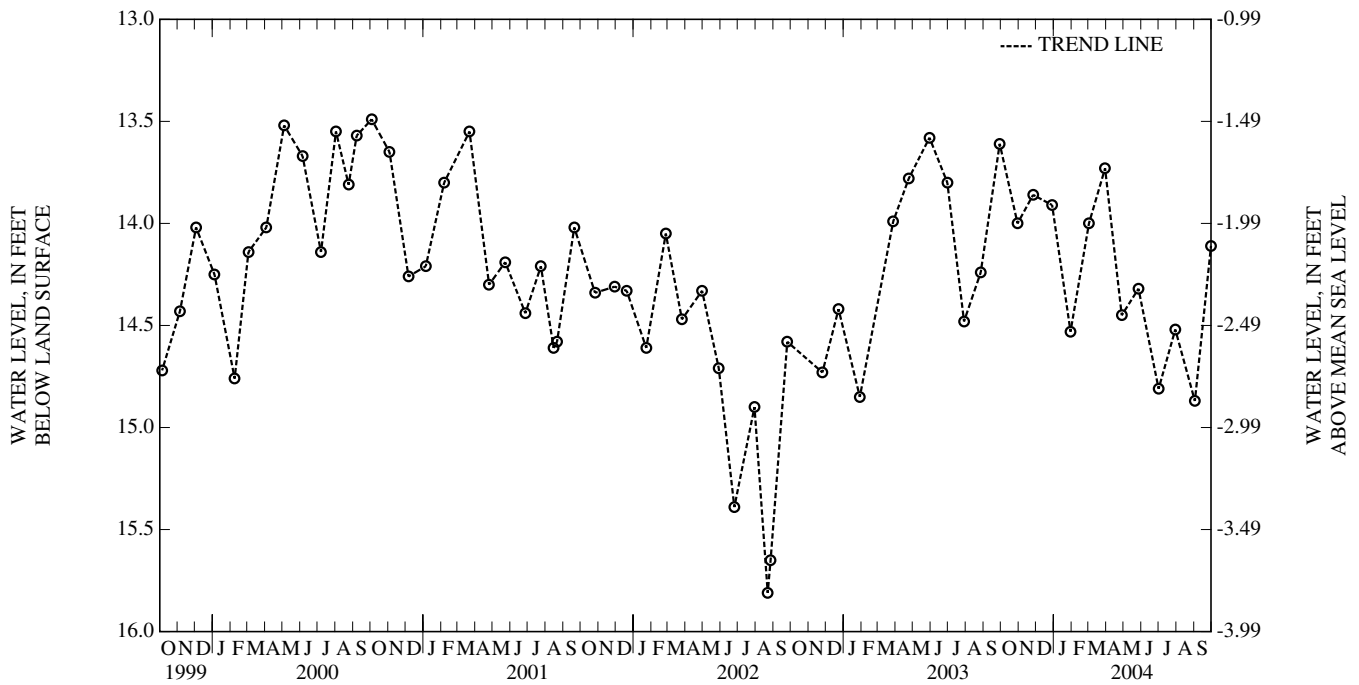
PERIOD OF RECORD.--October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.97 ft below land surface, August 1, 1990; lowest measured, 15.81 ft below land surface, August 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	14.00	JAN 30, 2004	14.53	APR 28, 2004	14.45	JUL 30, 2004	14.52
NOV 26	13.86	MAR 02	14.00	MAY 27	14.32	SEP 02	14.87
DEC 29	13.91	30	13.73	JUL 01	14.81	30	14.11

HIGHEST 13.73 MAR 30, 2004
 LOWEST 14.87 SEP 02, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Eb 157. SITE ID.--385852076195202. PERMIT NUMBER.--QA-81-0475.

LOCATION.--Lat 38°58'52", long 76°19'52", Hydrologic Unit 02060002, north of US Rt. 50, Terrapin Beach Park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 120 ft; casing diameter 4 in., to 110 ft; screen diameter 4 in., from 110 to 120 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel from May 1989 to November 1991, March 1999 to current year. Twice yearly water level measurements from March 1988 to April 1989, April 1992 to February 1999.

DATUM.--Elevation of land surface is 11.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

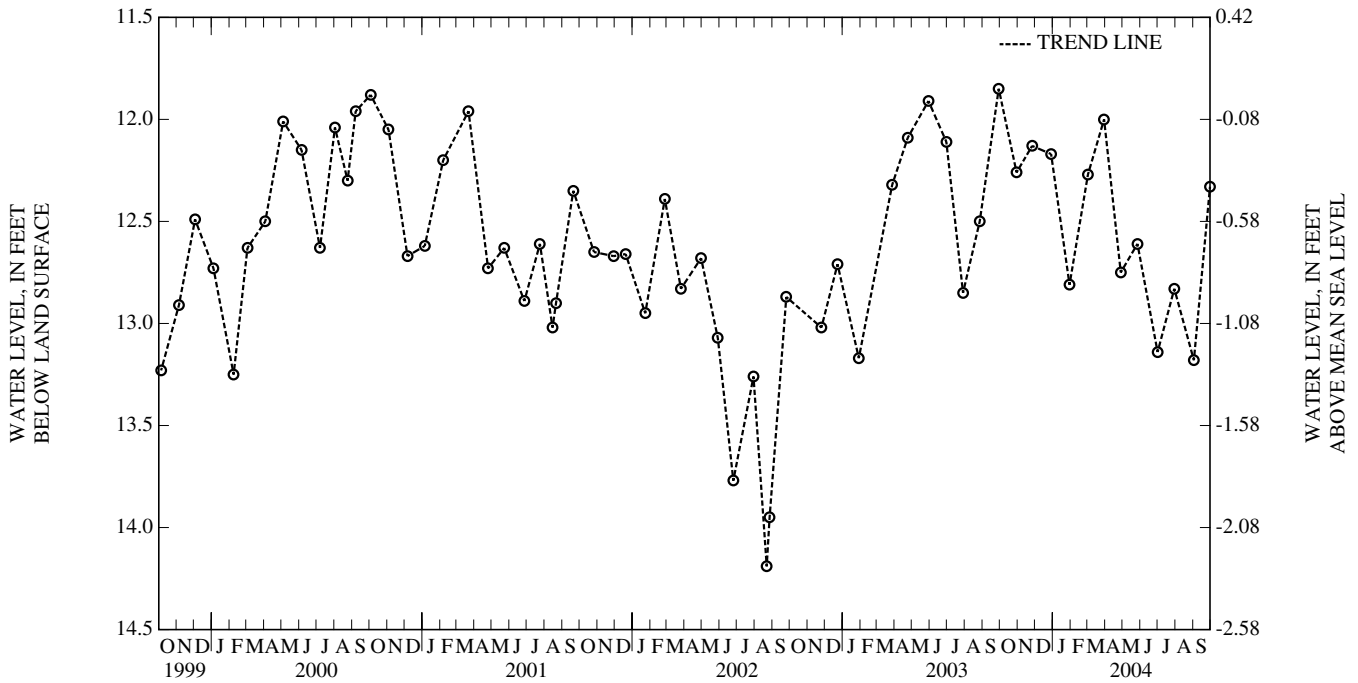
PERIOD OF RECORD.--October 1984, April 1985 to June 1986, March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.40 ft below land surface, December 2, 1985; lowest measured, 14.19 ft below land surface, August 22, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	12.26	JAN 30, 2004	12.81	APR 28, 2004	12.75	JUL 30, 2004	12.83
NOV 26	12.13	MAR 02	12.27	MAY 27	12.61	SEP 02	13.18
DEC 29	12.17	30	12.00	JUL 01	13.14	30	12.33

HIGHEST 12.00 MAR 30, 2004
 LOWEST 13.18 SEP 02, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNE'S COUNTY—Continued

WELL NUMBER.--QA Eb 167. SITE ID.--385850076183601. PERMIT NUMBER.--QA-94-0318

LOCATION.--Lat 38°58'50", long 76°18'36", Hydrologic Unit 02060002, at Stevensville. Owner: Queen Annes County.

AQUIFER.--Upper Patapsco. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 760 ft; casing diameter 10 in., to 500 ft; 6 in. from 500 to 606 ft., and 688 to 722 ft.; screened from 606 to 688 ft. and 722 to 760 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.50 ft above land surface.

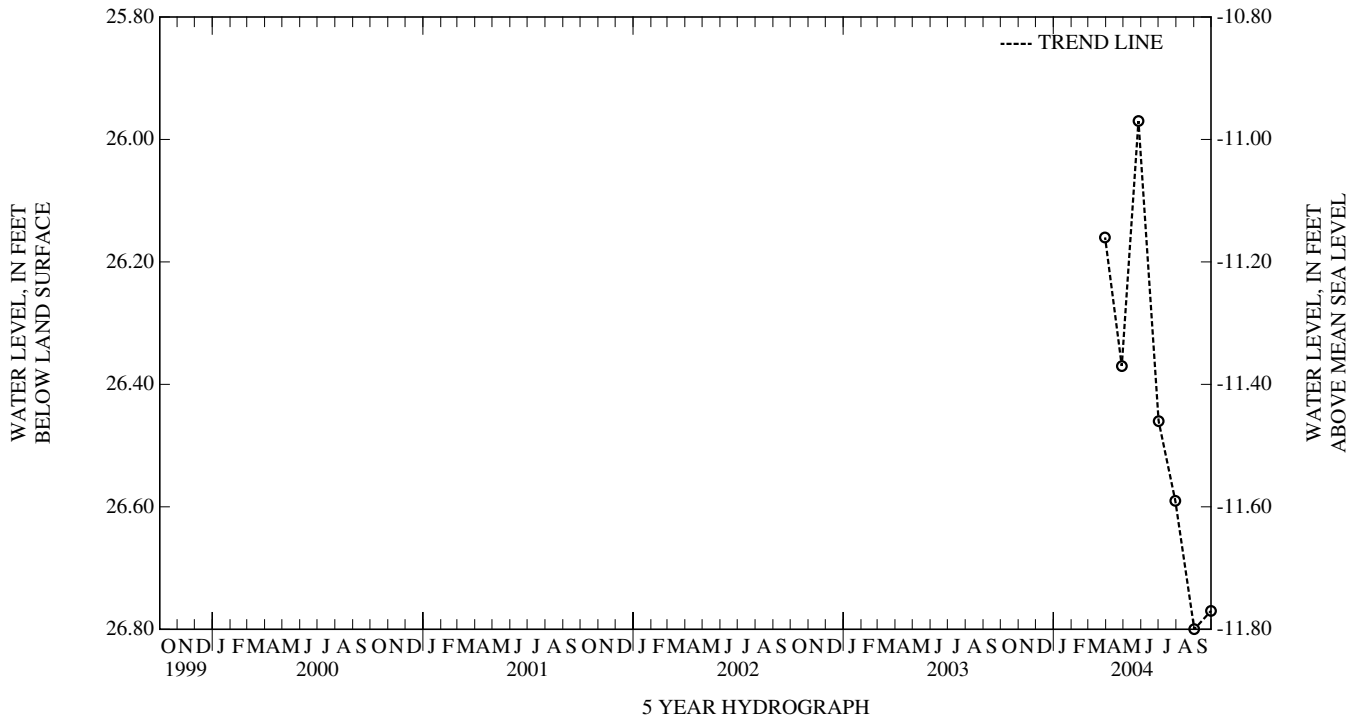
REMARKS.--Queen Annes County Water-Level Network observation well.

PERIOD OF RECORD.--September 1996, and March 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.97 ft below land surface, May 27, 2004; lowest measured, 26.80 ft below land surface, September 1, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 30, 2004	26.16	MAY 27, 2004	25.97	JUL 30, 2004	26.59	SEP 30, 2004	26.77
APR 28	26.37	JUL 01	26.46	SEP 01	26.80		
HIGHEST 25.97 MAY 27, 2004							
LOWEST 26.80 SEP 01, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNE'S COUNTY—Continued

WELL NUMBER.--QA Eb 182. SITE ID.--385850076183501.--PERMIT NUMBER.--QA-94-1444

LOCATION.--Lat 38°58'50", long 76°18'35", Hydrologic Unit 02060002, at Stevensville. Owner: Queen Annes County.

AQUIFER.--Lower Patapsco. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 1,580 ft; casing diameter 5 in., to 280 ft; casing diameter 5 in., to 280 ft; 4 in., 280 to 1,460 ft; screened from 1,460 to 1,480 ft; 1,520 to 1,530 ft; 1,550 to 1,580 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Altitude of land surface is 14 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.80 ft above land surface.

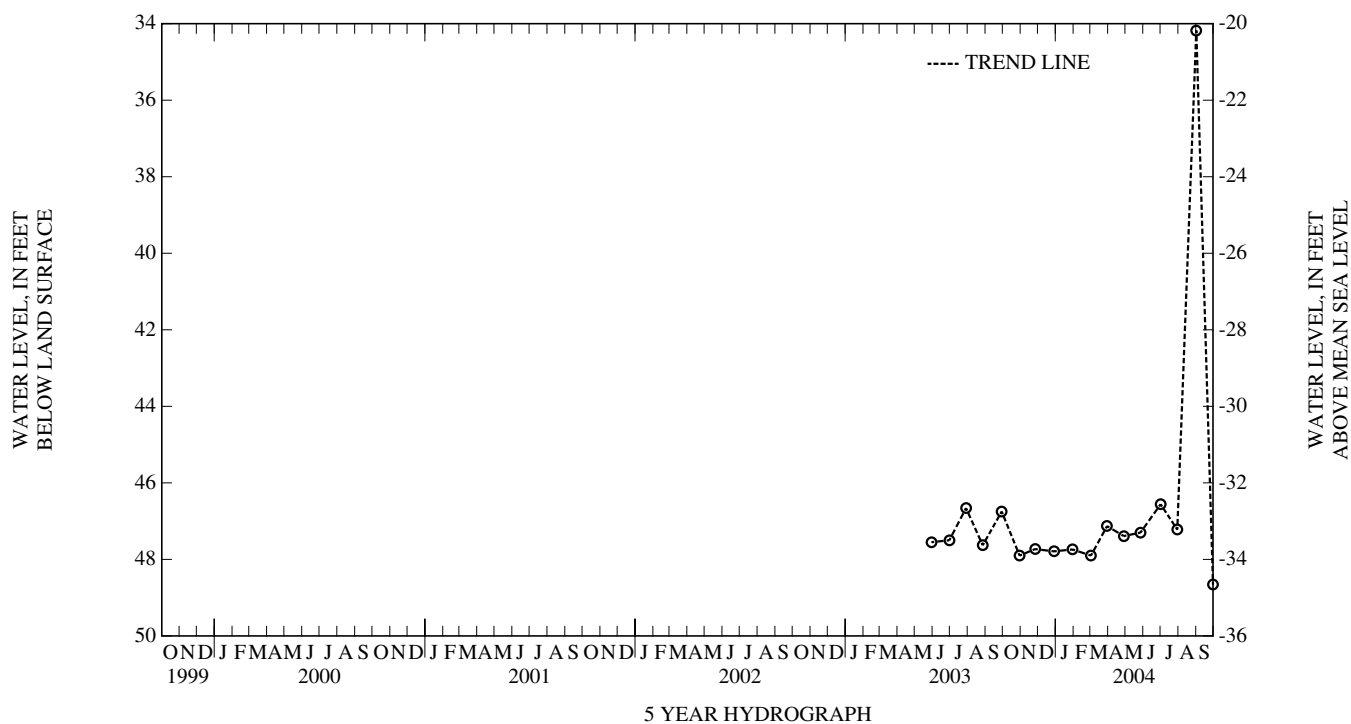
REMARKS.--Queen Annes County Water-Level Network observation well. Water level of 34.18 ft below land surface on September 1, 2004 due to a nearby production being turned off for a short period of time.

PERIOD OF RECORD.--April 1999, May 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.20 ft below land surface, April 1, 1999; lowest measured, 48.66 ft below land surface, September 30, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	47.90	JAN 30, 2004	47.74	APR 28, 2004	47.39	JUL 30, 2004	47.22
NOV 26	47.73	MAR 02	47.90	MAY 27	47.30	SEP 01	34.18
DEC 29	47.79	30	47.13	JUL 01	46.56	30	48.66
HIGHEST 34.18 SEP 01, 2004							
LOWEST 48.66 SEP 30, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Ec 1. SITE ID.--385756076105301.

LOCATION.--Lat 38°57'56", long 76°10'53", Hydrologic Unit 02060002, near Grasonville, south side of MD Rt. 18, 0.1 mi. northeast of intersection with Nesbit Rd. Owner: Maryland State Highway Administration.

AQUIFER.--Kent Island Formation (Columbia aquifer) of Pleistocene age. Aquifer code: 112KILD.

WELL CHARACTERISTICS.--Drilled, unused, water-table driven well, depth 21 ft; casing diameter 1.25 in., to 21 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 2 in. coupling, 0.27 ft above land surface.

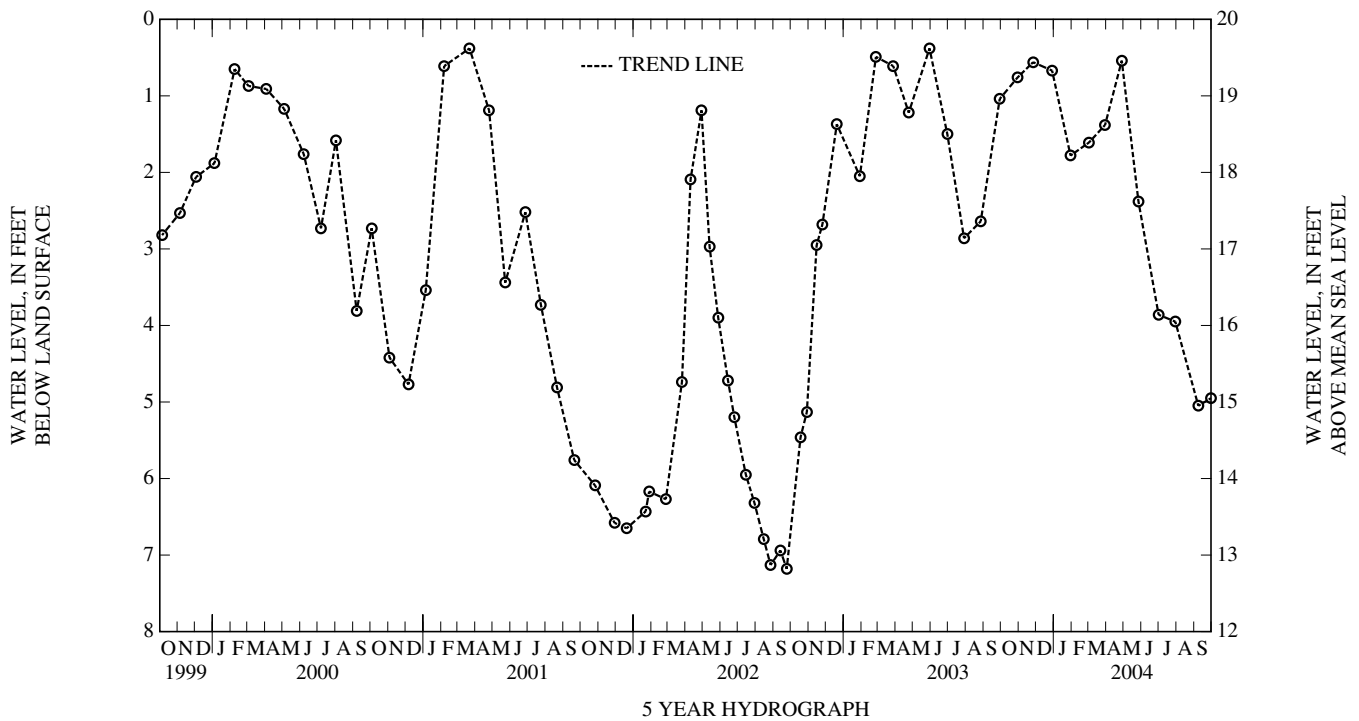
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by natural climatic response.

PERIOD OF RECORD.--September 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft below land surface, August 2, 1996; lowest measured, 8.46 ft below land surface, January 7, 1988.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	.76	JAN 30, 2004	1.78	APR 28, 2004	.54	JUL 30, 2004	3.95
NOV 26	.56	MAR 02	1.61	MAY 27	2.38	SEP 08	5.05
DEC 29	.67	30	1.38	JUL 01	3.86	30	4.95
HIGHEST	.54	APR 28, 2004					
LOWEST	5.05	SEP 08, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNE'S COUNTY—Continued

WELL NUMBER.--QA Ec 89. SITE ID.--385758076141901.--PERMIT NUMBER.--QA-81-0873

LOCATION.--Lat 38°57'58", long 76°14'19", Hydrologic Unit 02060002, at Oyster Cove #1. Owner: Queen Annes County.

AQUIFER.--Upper Patapsco. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 780 ft; casing diameter 6 in., to 729 ft; casing diameter 4 in., to 750 ft; screened from 750 to 780 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Altitude of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.02 ft above land surface.

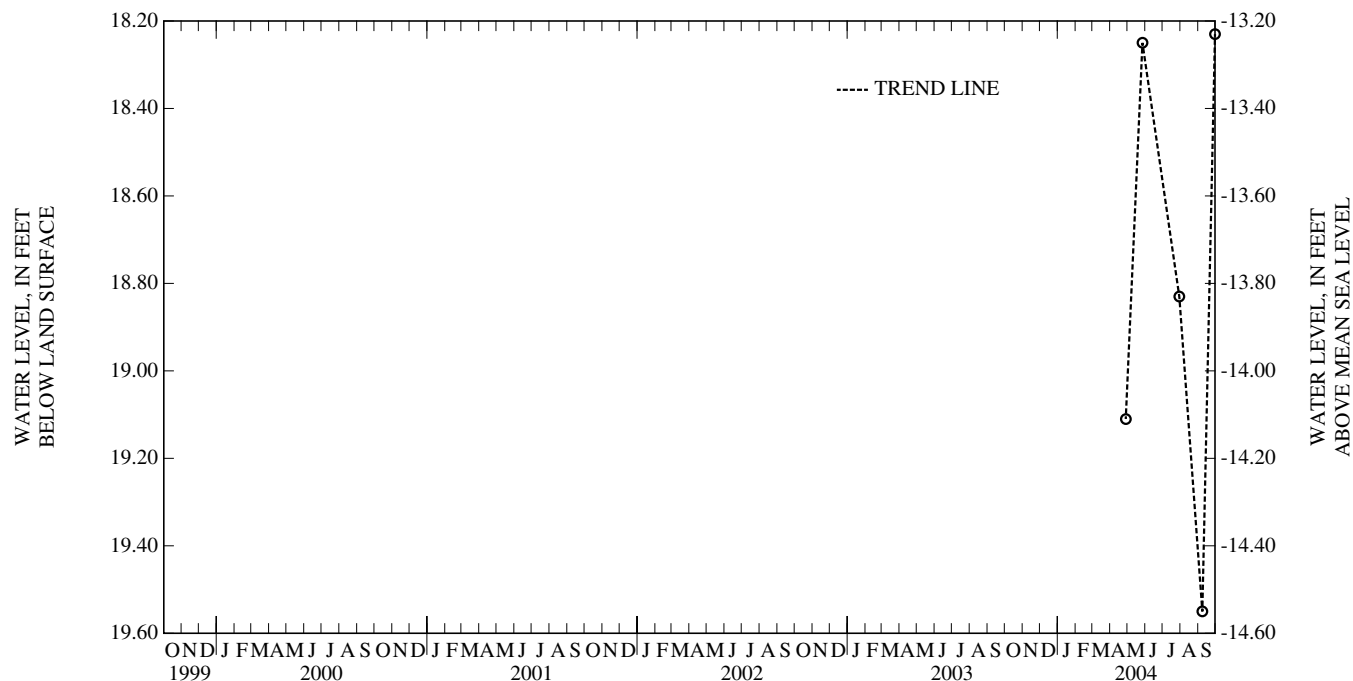
REMARKS.--Queen Annes County Water-Level Network observation well.

PERIOD OF RECORD.--September 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.20 ft below land surface, June 29, 1998; lowest measured, 19.55 ft below land surface, September 8, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 28, 2004	19.11	JUL 30, 2004	18.83	SEP 30, 2004	18.23
MAY 27	18.25	SEP 08	19.55		
HIGHEST 18.23 SEP 30, 2004					
LOWEST 19.55 SEP 08, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Ef 29. SITE ID.--385534075573601. PERMIT NUMBER.--QA-81-1593.

LOCATION.--Lat 38°55'38", long 75°57'40", Hydrologic Unit 02060005, off east side of MD Rt. 309, 0.2 mi. north of intersection with MD Rt. 404, Tuckahoe State Park. Owner: Md. Dept. of Natural Resources, Fisheries Division.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,325 ft; casing diameter 14 in., to 500 ft, and 8 in., from 500 to 1,110 ft, 1,120 to 1,135 ft, 1,180 to 1,195 ft, 1,210 to 1,230 ft, 1,270 to 1,285 ft, and 1,315 to 1,325 ft; screen diameter 8 in., from 1,110 to 1,120 ft, 1,135 to 1,180 ft, 1,195 to 1,210 ft, 1,230 to 1,270 ft, and 1,285 to 1,315 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 61.69 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2 in. pipe, 3.80 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

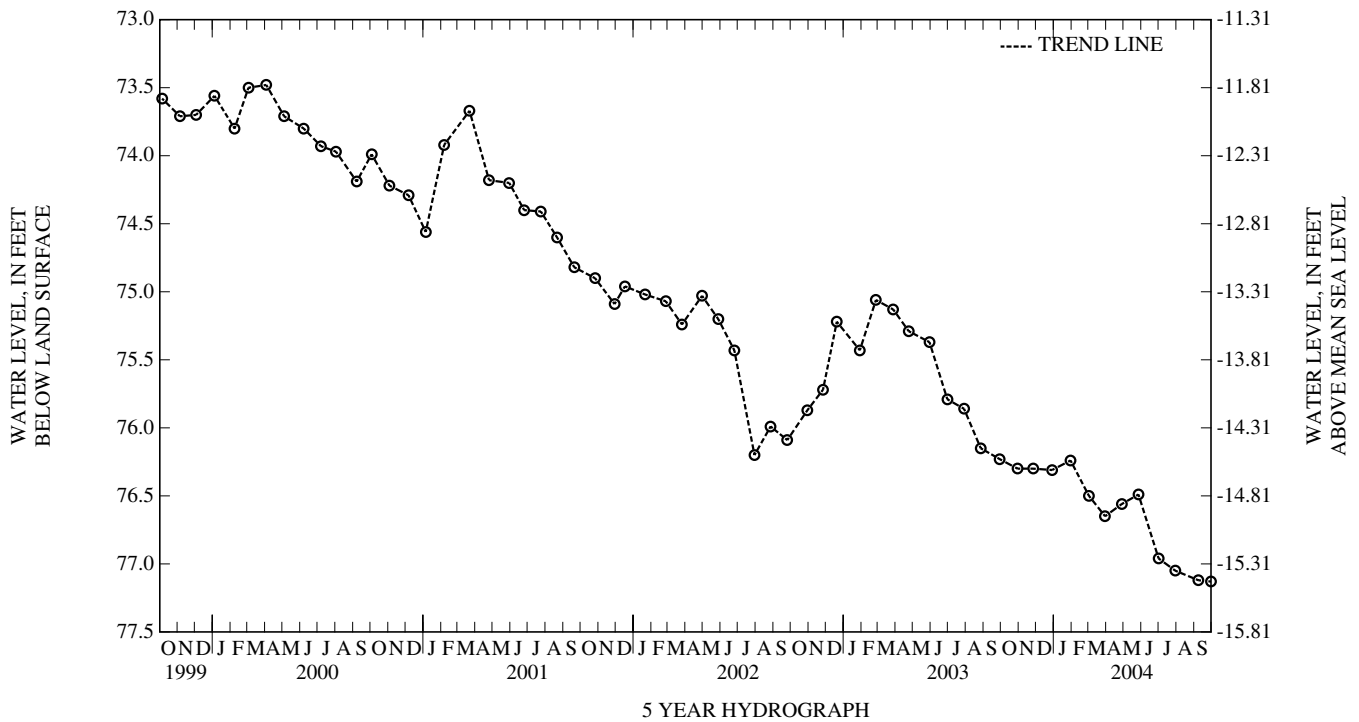
PERIOD OF RECORD.-- June 1986 to December 1986, November 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.30 ft below land surface, August 27, 1986; lowest measured, 77.13 ft below land surface, September 30, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	76.30	JAN 30, 2004	76.24	APR 28, 2004	76.56	JUL 30, 2004	77.05
NOV 26	76.30	MAR 02	76.50	MAY 27	76.49	SEP 08	77.12
DEC 29	76.31	30	76.65	JUL 01	76.96	30	77.13

HIGHEST 76.24 JAN 30, 2004
 LOWEST 77.13 SEP 30, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Fc 7. SITE ID.--385429076120201. PERMIT NUMBER.--QA-73-2191.

LOCATION.--Lat 38°54'29", long 76°12'02", Hydrologic Unit 02060002, off Greenwood Shoals, at Prospect Plantation. Owner: Maryland Community Developers Incorporated.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 356 ft; casing diameter 4 in., to 336 ft; screen diameter 2 in., from 336 to 356 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawals.

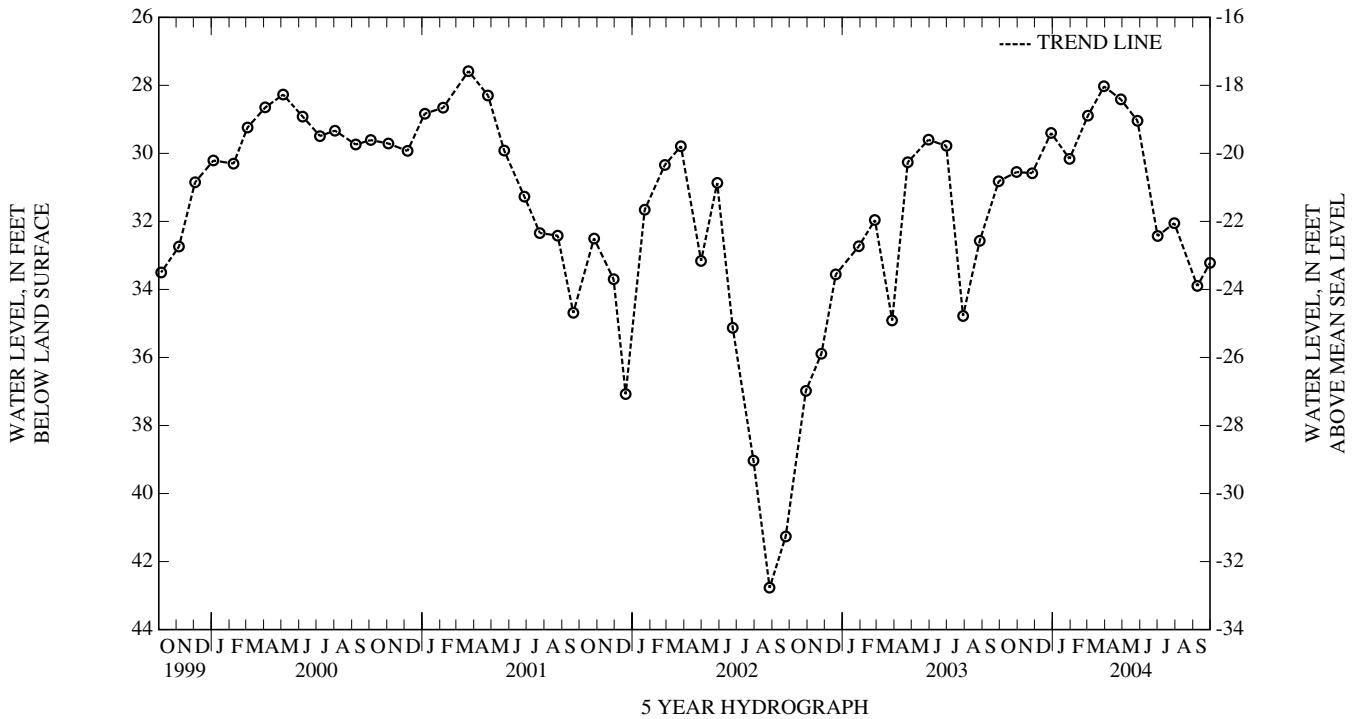
PERIOD OF RECORD.--February 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.77 ft below land surface, March 3, 1983; lowest measured, 42.77 ft below land surface, August 27, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30, 2003	30.55	JAN 30, 2004	30.16	APR 28, 2004	28.41	JUL 30, 2004	32.05
NOV 26	30.58	MAR 02	28.89	MAY 27	29.04	SEP 08	33.90
DEC 29	29.40	30	28.03	JUL 01	32.43	30	33.22

HIGHEST 28.03 MAR 30, 2004
 LOWEST 33.90 SEP 08, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY

WELL NUMBER.--SM Bb 15. SITE ID.--382838076470101. PERMIT NUMBER.--SM-73-3430.

LOCATION.--Lat 38°28'38", long 76°47'01", Hydrologic Unit 02070011, at Charlotte Hall Veterans Home. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 460 ft; casing diameter 4 in., to 441 ft; casing diameter 2 in., from 441 to 450 ft; screen diameter 2 in., from 450 to 460 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 165.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.10 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

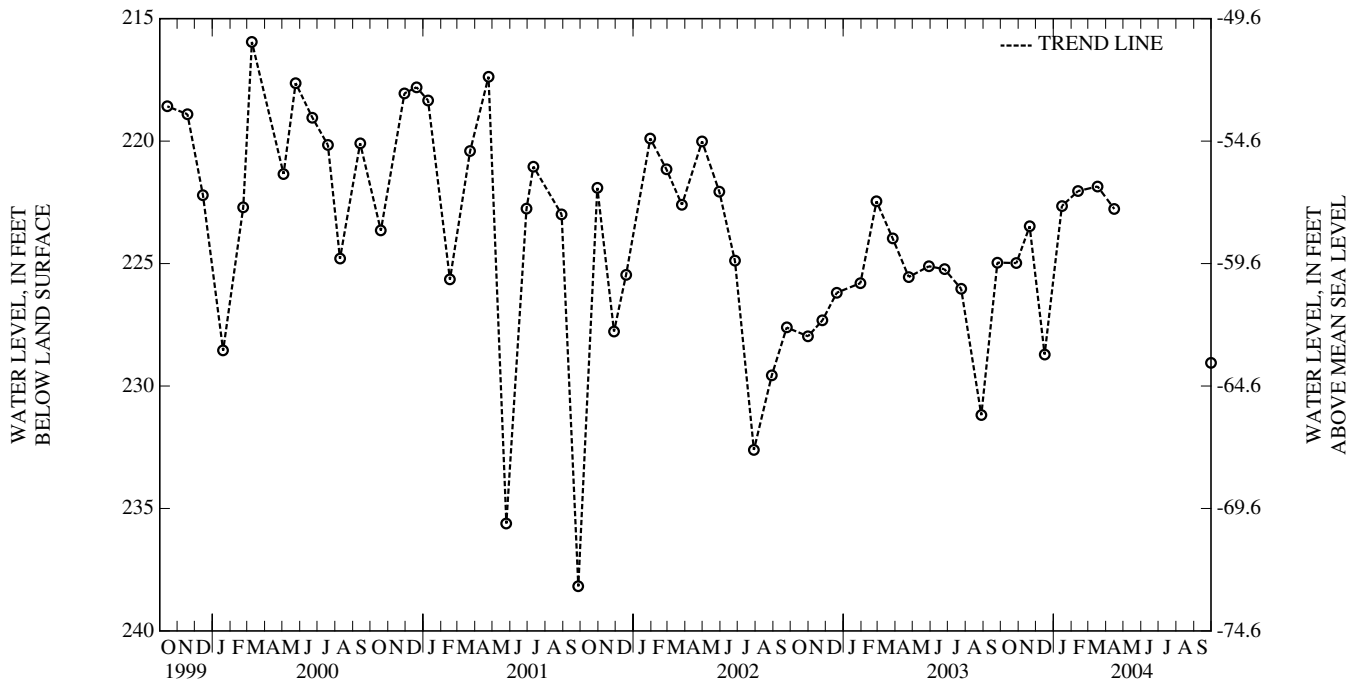
PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 159.76 ft below land surface, August 10, 1979, and Aug. 31, 1979; lowest measured, 238.18 ft below land surface, September 27, 2001.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	224.98	DEC 16, 2003	228.71	FEB 12, 2004	222.04	APR 15, 2004	222.77
NOV 20	223.48	JAN 15, 2004	222.65	MAR 17	221.85	SEP 30	229.05

HIGHEST 221.85 MAR 17, 2004
 LOWEST 229.05 SEP 30, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Bb 22. SITE ID.--382838076470102. PERMIT NUMBER.--SM-73-3787.

LOCATION.--Lat 38°28'38", long 76°47'01", Hydrologic Unit 02070011, at Charlotte Hall Veterans Home. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 218 ft; casing diameter 4 in., to 210 ft; screen diameter 2 in., from 210 to 218 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 165.21 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.55 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. On July 12, 1989, the water-level measured 27.95 ft below land surface; this decline was due to a nearby production well pump test.

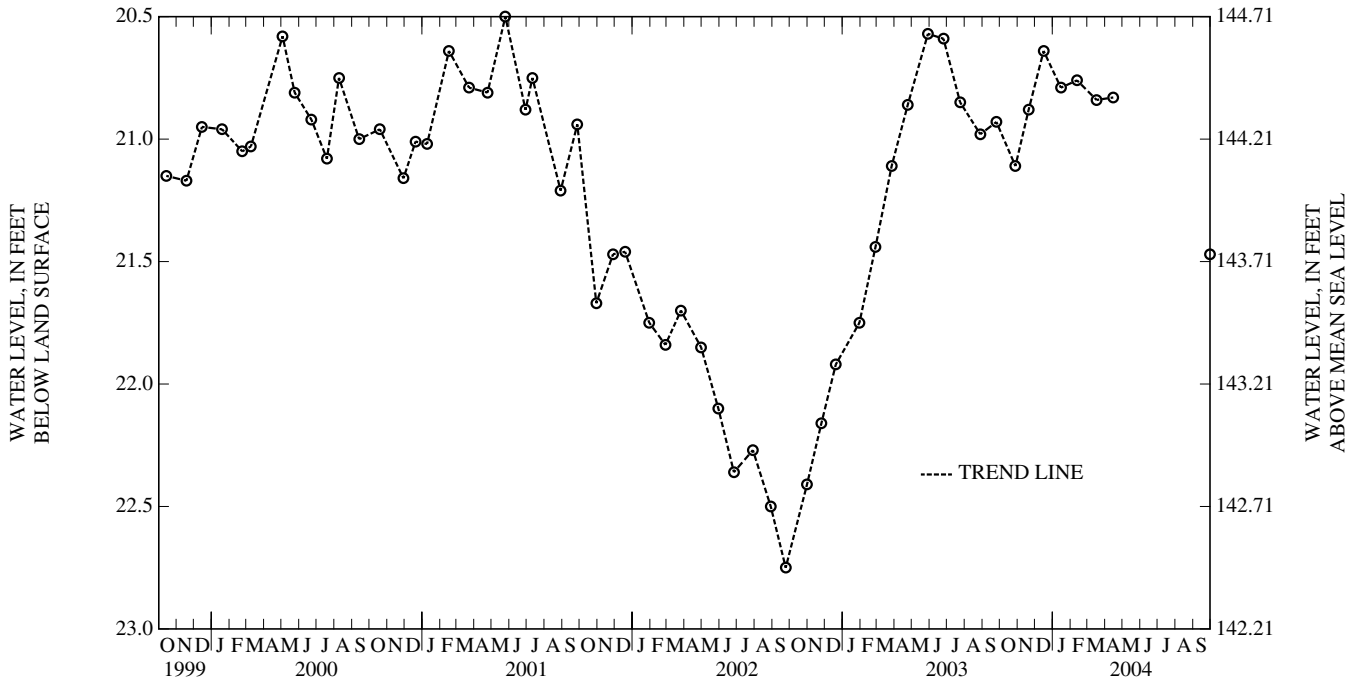
PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.27 ft below land surface, July 9, 1980; lowest measured, 22.75 ft below land surface, September 24, 2002--See REMARKS.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	21.11	DEC 16, 2003	20.64	FEB 12, 2004	20.76	APR 15, 2004	20.83
NOV 20	20.88	JAN 15, 2004	20.79	MAR 17	20.84	SEP 30	21.47

HIGHEST 20.64 DEC 16, 2003
 LOWEST 21.47 SEP 30, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Bc 39. SITE ID.--382605076430201. PERMIT NUMBER.--SM-94-3921.

LOCATION.--Lat 38°26'05", long 76°43'02", Hydrologic Unit 02060006, at Persimmon Hills Estate. Owner: Maryland Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 1,532 ft; casing diameter 12 in., 39 ft, casing diameter 4 in., from +2.5 to 1,492, 1,512 to 1,522 ft, and 1,532 to 1,542 ft; screen diameter 4 in., from 1,492 to 1,512 ft, and 1,522 to 1,532 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, April 2002 to current year.

DATUM.--Elevation of land surface is 161.54 ft above North American Vertical Datum of 1988. Measuring point: Top of shelter platform, 2.50 ft above land surface.

REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels are affected by regional ground-water withdrawal.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.99 ft below sea level, May 2, 2002 (recorder); lowest measured, 32.59 ft below sea level, September 14, 15 16, 20, and 28, 2004 (recorder).

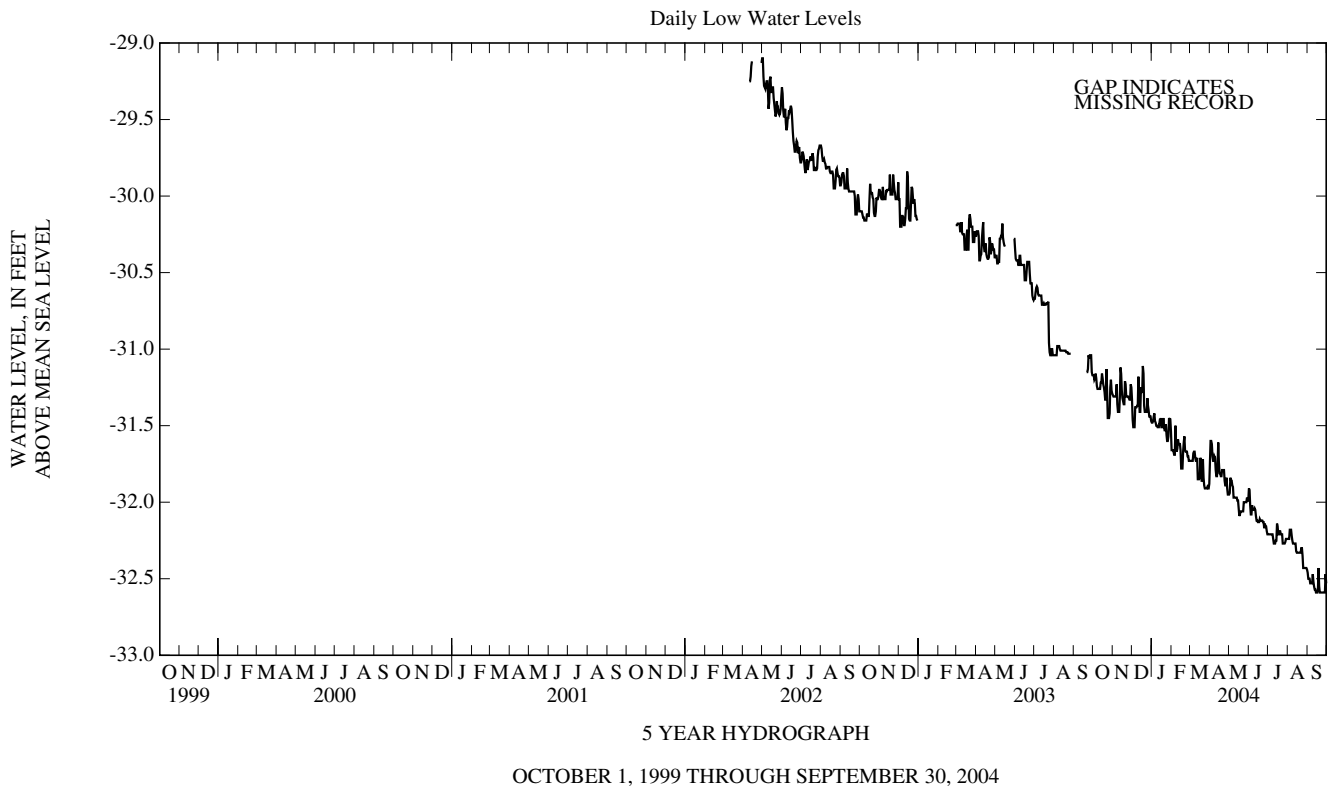
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	-31.19	JAN 15, 2004	-31.44	APR 15, 2004	-31.71	SEP 30, 2004	-32.51
NOV 20	-31.16	FEB 12	-31.62	JUN 01	-31.92		
DEC 16	-31.28	MAR 17	-31.70	25	-32.14		
LOWEST -32.51		SEP 30, 2004					
HIGHEST -31.16		NOV 20, 2003					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	-31.17	-31.17	-31.29	-31.30	-31.25	-31.33	-31.47	-31.48	-31.54	-31.66	-31.73	-31.73
2	-31.17	-31.17	-31.30	-31.31	-31.32	-31.46	-31.47	-31.48	-31.66	-31.66	-31.71	-31.73
3	-31.17	-31.20	-31.31	-31.31	-31.46	-31.51	-31.44	-31.47	-31.52	-31.66	-31.71	-31.73
4	-31.15	-31.19	-31.31	-31.31	-31.51	-31.51	-31.42	-31.44	-31.53	-31.67	-31.73	-31.73
5	-31.15	-31.16	-31.31	-31.31	-31.38	-31.51	-31.41	-31.42	-31.67	-31.69	-31.68	-31.73
6	-31.16	-31.19	-31.21	-31.31	-31.38	-31.38	-31.41	-31.47	-31.46	-31.69	-31.62	-31.68
7	-31.19	-31.24	-31.21	-31.23	-31.38	-31.38	-31.47	-31.48	-31.44	-31.50	-31.63	-31.67
8	-31.23	-31.26	-31.23	-31.36	-31.37	-31.38	-31.48	-31.50	-31.50	-31.64	-31.63	-31.67
9	-31.26	-31.26	-31.36	-31.41	-31.37	-31.37	-31.50	-31.50	-31.64	-31.67	-31.67	-31.71
10	-31.26	-31.26	-31.41	-31.41	-31.18	-31.37	-31.50	-31.51	-31.57	-31.65	-31.71	-31.73
11	-31.26	-31.26	-31.31	-31.41	-31.08	-31.18	-31.51	-31.51	-31.57	-31.59	-31.71	-31.73
12	-31.22	-31.26	-31.11	-31.31	-31.13	-31.32	-31.48	-31.51	-31.59	-31.62	-31.71	-31.71
13	-31.22	-31.22	-31.09	-31.12	-31.32	-31.41	-31.47	-31.48	-31.62	-31.62	-31.71	-31.85
14	-31.05	-31.22	-31.12	-31.16	-31.12	-31.41	-31.41	-31.49	-31.59	-31.62	-31.85	-31.85
15	-31.02	-31.16	-31.16	-31.27	-31.12	-31.25	-31.40	-31.45	-31.59	-31.66	-31.84	-31.85
16	-31.16	-31.19	-31.27	-31.32	-31.23	-31.28	-31.45	-31.51	-31.66	-31.78	-31.68	-31.84
17	-31.18	-31.23	-31.32	-31.34	-31.11	-31.28	-31.50	-31.51	-31.78	-31.78	-31.68	-31.71
18	-31.23	-31.25	-31.34	-31.36	-31.11	-31.11	-31.28	-31.51	-31.67	-31.78	-31.71	-31.73
19	-31.25	-31.28	-31.14	-31.36	-31.11	-31.16	-31.30	-31.45	-31.61	-31.67	-31.73	-31.86
20	-31.28	-31.33	-31.14	-31.21	-31.16	-31.37	-31.45	-31.50	-31.53	-31.61	-31.70	-31.86
21	-31.13	-31.33	-31.21	-31.23	-31.37	-31.41	-31.50	-31.53	-31.52	-31.57	-31.68	-31.72
22	-31.13	-31.13	-31.22	-31.31	-31.41	-31.41	-31.46	-31.53	-31.57	-31.66	-31.72	-31.84
23	-31.13	-31.27	-31.31	-31.31	-31.41	-31.41	-31.46	-31.49	-31.66	-31.67	-31.84	-31.89
24	-31.27	-31.45	-31.22	-31.31	-31.22	-31.41	-31.49	-31.56	-31.67	-31.67	-31.89	-31.91
25	-31.45	-31.45	-31.22	-31.31	-31.24	-31.32	-31.56	-31.60	-31.67	-31.67	-31.91	-31.91
26	-31.42	-31.45	-31.31	-31.32	-31.32	-31.37	-31.57	-31.60	-31.67	-31.70	-31.91	-31.91
27	-31.17	-31.42	-31.32	-31.33	-31.37	-31.40	-31.45	-31.57	-31.70	-31.70	-31.89	-31.91
28	-31.17	-31.25	-31.11	-31.33	-31.40	-31.44	-31.45	-31.45	-31.70	-31.73	-31.89	-31.90
29	-31.18	-31.20	-31.11	-31.23	-31.43	-31.44	-31.45	-31.46	-31.73	-31.73	-31.90	-31.91
30	-31.18	-31.27	-31.23	-31.25	-31.39	-31.44	-31.46	-31.46	---	---	-31.88	-31.91
31	-31.27	-31.29	---	---	-31.44	-31.47	-31.46	-31.54	---	---	-31.74	-31.88
MONTH	-31.02	-31.45	-31.09	-31.41	-31.08	-31.51	-31.28	-31.60	-31.44	-31.78	-31.62	-31.91

ST. MARYS COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-31.60	-31.74	-31.94	-31.95	-31.88	-31.91	-32.21	-32.21	-32.24	-32.24	-32.44	-32.46
2	-31.60	-31.60	-31.84	-31.94	-31.91	-31.92	-32.21	-32.21	-32.24	-32.24	-32.46	-32.50
3	-31.60	-31.60	-31.84	-31.84	-31.92	-32.02	-32.21	-32.21	-32.18	-32.24	-32.50	-32.50
4	-31.59	-31.62	-31.84	-31.86	-32.02	-32.08	-32.21	-32.21	-32.18	-32.18	-32.50	-32.50
5	-31.62	-31.70	-31.86	-31.86	-32.02	-32.08	-32.21	-32.21	-32.18	-32.18	-32.50	-32.53
6	-31.70	-31.73	-31.86	-31.89	-32.02	-32.02	-32.21	-32.21	-32.18	-32.18	-32.53	-32.53
7	-31.70	-31.73	-31.89	-31.90	-32.02	-32.05	-32.21	-32.21	-32.18	-32.22	-32.53	-32.53
8	-31.70	-31.70	-31.90	-31.97	-32.04	-32.05	-32.21	-32.21	-32.22	-32.25	-32.47	-32.53
9	-31.70	-31.71	-31.97	-31.97	-32.04	-32.05	-32.21	-32.24	-32.25	-32.27	-32.47	-32.47
10	-31.71	-31.79	-31.97	-31.97	-32.04	-32.04	-32.24	-32.27	-32.27	-32.27	-32.47	-32.52
11	-31.79	-31.83	-31.97	-31.97	-32.04	-32.05	-32.27	-32.27	-32.27	-32.27	-32.52	-32.55
12	-31.75	-31.83	-31.97	-31.97	-32.05	-32.09	-32.25	-32.27	-32.27	-32.27	-32.55	-32.57
13	-31.58	-31.75	-31.97	-31.97	-32.09	-32.12	-32.25	-32.25	-32.27	-32.27	-32.57	-32.57
14	-31.58	-31.61	-31.97	-31.99	-32.12	-32.12	-32.14	-32.25	-32.27	-32.32	-32.57	-32.59
15	-31.61	-31.74	-31.99	-31.99	-32.12	-32.13	-32.14	-32.14	-32.32	-32.33	-32.59	-32.59
16	-31.74	-31.81	-31.99	-32.04	-32.13	-32.13	-32.14	-32.16	-32.33	-32.33	-32.57	-32.59
17	-31.81	-31.81	-32.04	-32.09	-32.11	-32.13	-32.16	-32.21	-32.33	-32.33	-32.43	-32.57
18	-31.81	-31.83	-32.06	-32.08	-32.11	-32.11	-32.19	-32.21	-32.33	-32.33	-32.38	-32.43
19	-31.79	-31.83	-32.06	-32.06	-32.11	-32.12	-32.19	-32.19	-32.33	-32.33	-32.43	-32.55
20	-31.79	-31.79	-32.06	-32.06	-32.12	-32.12	-32.19	-32.19	-32.33	-32.33	-32.55	-32.59
21	-31.79	-31.79	-32.06	-32.06	-32.12	-32.12	-32.19	-32.21	-32.30	-32.33	-32.59	-32.59
22	-31.79	-31.79	-32.06	-32.06	-32.12	-32.12	-32.20	-32.21	-32.30	-32.30	-32.59	-32.59
23	-31.79	-31.79	-32.00	-32.06	-32.12	-32.13	-32.20	-32.21	-32.30	-32.30	-32.59	-32.59
24	-31.79	-31.86	-32.00	-32.00	-32.13	-32.13	-32.21	-32.27	-32.30	-32.35	-32.59	-32.59
25	-31.86	-31.89	-32.00	-32.00	-32.13	-32.17	-32.27	-32.27	-32.35	-32.43	-32.59	-32.59
26	-31.84	-31.89	-32.00	-32.00	-32.14	-32.14	-32.27	-32.27	-32.43	-32.43	-32.59	-32.59
27	-31.79	-31.84	-32.00	-32.00	-32.14	-32.16	-32.26	-32.27	-32.43	-32.43	-32.59	-32.59
28	-31.79	-31.91	-31.90	-32.00	-32.16	-32.16	-32.24	-32.26	-32.43	-32.43	-32.40	-32.59
29	-31.91	-31.95	-31.90	-31.97	-32.16	-32.19	-32.24	-32.24	-32.43	-32.43	-32.40	-32.47
30	-31.95	-31.95	-31.97	-31.99	-32.19	-32.21	-32.24	-32.24	-32.42	-32.43	-32.47	-32.53
31	---	---	-31.88	-31.99	---	---	-32.24	-32.24	-32.42	-32.44	---	---
MONTH	-31.58	-31.95	-31.84	-32.09	-31.88	-32.21	-32.14	-32.27	-32.18	-32.44	-32.38	-32.59
YEAR	-31.02	-32.59										



ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 46. SITE ID.--381616076364701. PERMIT NUMBER.--SM-73-1990.

LOCATION.--Lat 38°16'16", long 76°36'47", Hydrologic Unit 02070011, at Leonardtown Senior High School, Redgate. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 296 ft; casing diameter 6 in., to 150 ft; casing diameter 2 in., from 150 to 286 ft; screen diameter 2 in., from 286 to 296 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 118.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.90 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

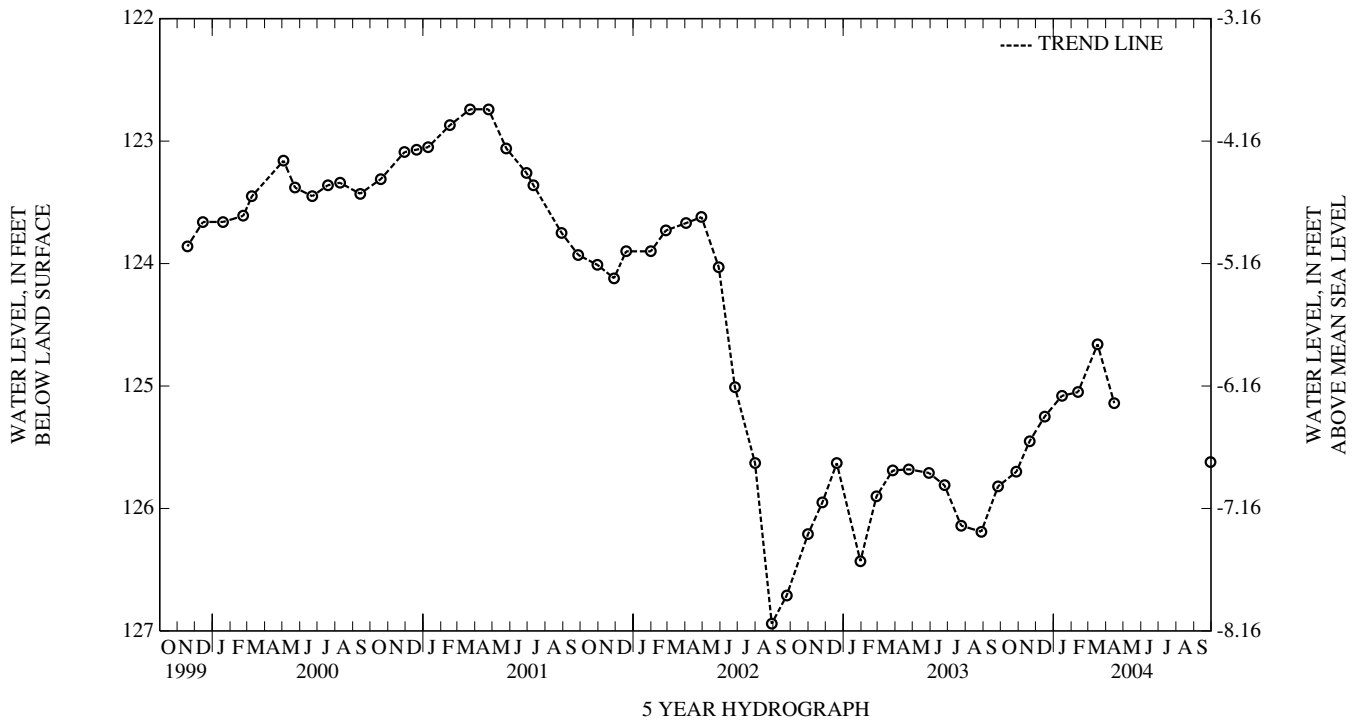
PERIOD OF RECORD.--October 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 109.36 ft below land surface, July 9, 1979; lowest measured, 126.94 ft below land surface, August 29, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	125.70	DEC 16, 2003	125.25	FEB 12, 2004	125.05	APR 15, 2004	125.14
NOV 20	125.45	JAN 15, 2004	125.08	MAR 17	124.66	SEP 29	125.62

HIGHEST 124.66 MAR 17, 2004
 LOWEST 125.70 OCT 28, 2003



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 49. SITE ID.--381616076364702. PERMIT NUMBER.--SM-73-3081.

LOCATION.--Lat 38°16'16", long 76°36'47", Hydrologic Unit 02070011, at Leonardtown Senior High School, Redgate. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 619 ft; casing diameter 6 in., to 46 ft; casing diameter 4 in., to 279 ft; casing diameter 1.5 in., from 279 to 534 ft, and 544 to 619 ft; screen diameter 3 in., from 534 to 544 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 118.94 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.40 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. The November 29, 2000, water level measured at 205.21 ft below land surface was the result of a nearby production well pumping for more than 24 hours.

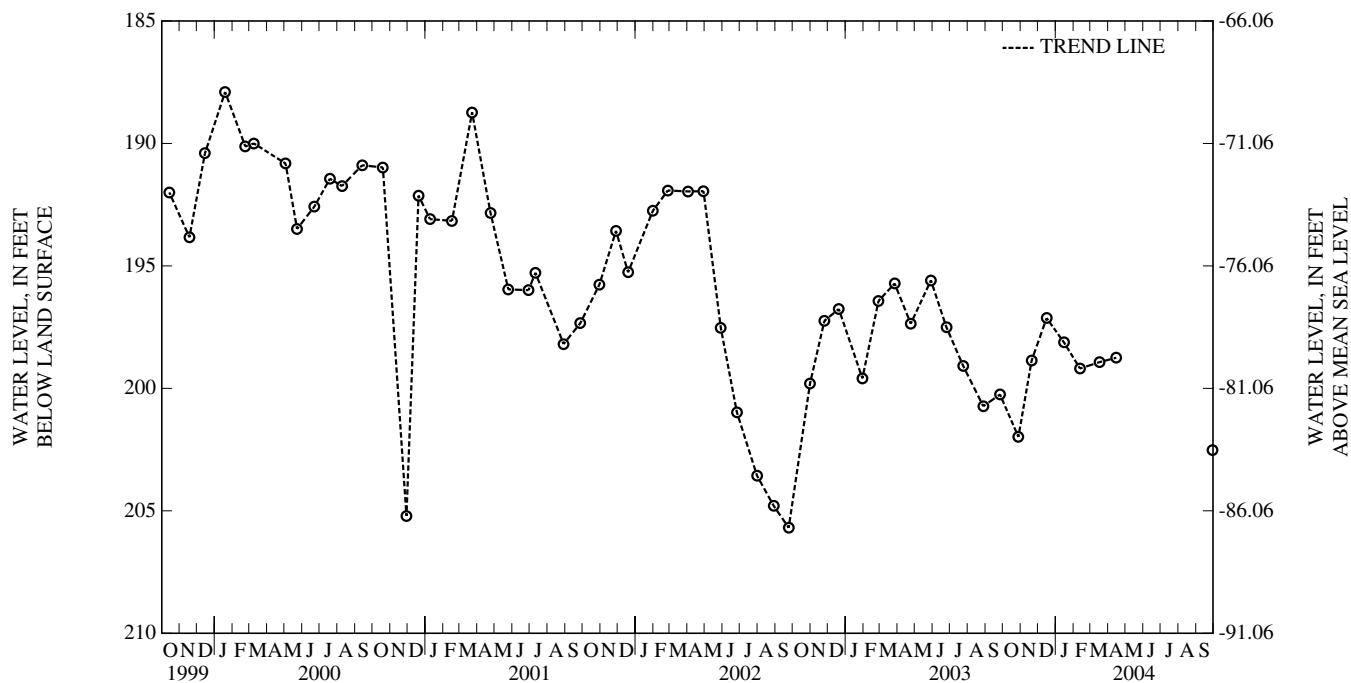
PERIOD OF RECORD.--December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 138.95 ft below land surface, April 5, 1979; lowest measured, 205.69 ft below land surface, September 24, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	201.98	DEC 16, 2003	197.13	FEB 12, 2004	199.19	APR 15, 2004	198.75
NOV 20	198.86	JAN 15, 2004	198.12	MAR 17	198.93	SEP 29	202.52

HIGHEST 197.13 DEC 16, 2003
LOWEST 202.52 SEP 29, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 50. SITE ID.--381807076380001. PERMIT NUMBER.--SM-73-3082.

LOCATION.--Lat 38°18'07", long 76°38'00", Hydrologic Unit 02070011, at Leonard Hall Junior Naval Academy, Leonardtown. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 515 ft; casing diameter 4 in., to 270 ft; casing diameter 2 in., from 270 to 505 ft; screen diameter 3 in., from 505 to 515 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 99.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.86 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

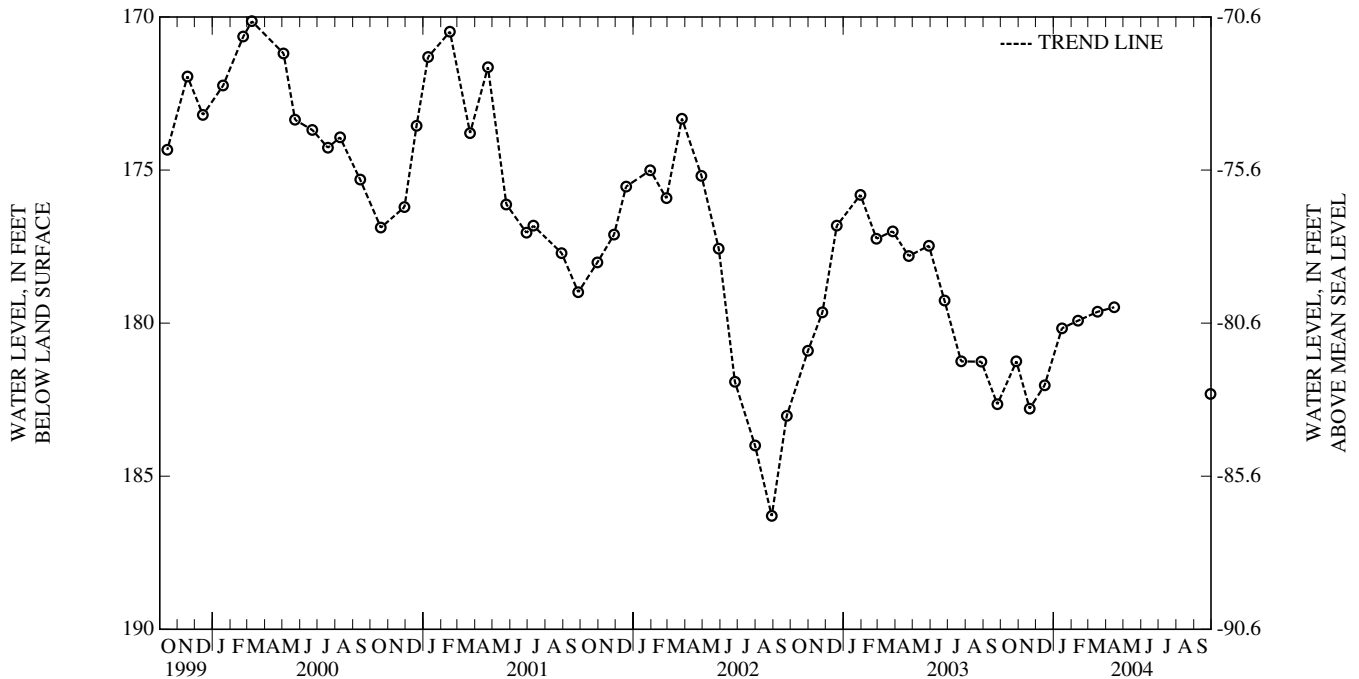
PERIOD OF RECORD.--December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 119.05 ft below land surface, February 2, 1979; lowest measured, 186.30 ft below land surface, August 29, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	181.25	DEC 16, 2003	182.03	FEB 12, 2004	179.92	APR 15, 2004	179.48
NOV 20	182.79	JAN 15, 2004	180.17	MAR 17	179.63	SEP 29	182.31

HIGHEST 179.48 APR 15, 2004
 LOWEST 182.79 NOV 20, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 62. SITE ID.--381616076364703. PERMIT NUMBER.--SM-73-3786.

LOCATION.--Lat 38°16'16", 76°36'47", Hydrologic Unit 02070011, at Leonardtown Senior High School, Redgate. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 358 ft; casing diameter 4 in., to 210 ft; casing diameter 2 in., from 210 to 348 ft; screen diameter 2 in., from 348 to 358 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 115 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.70 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

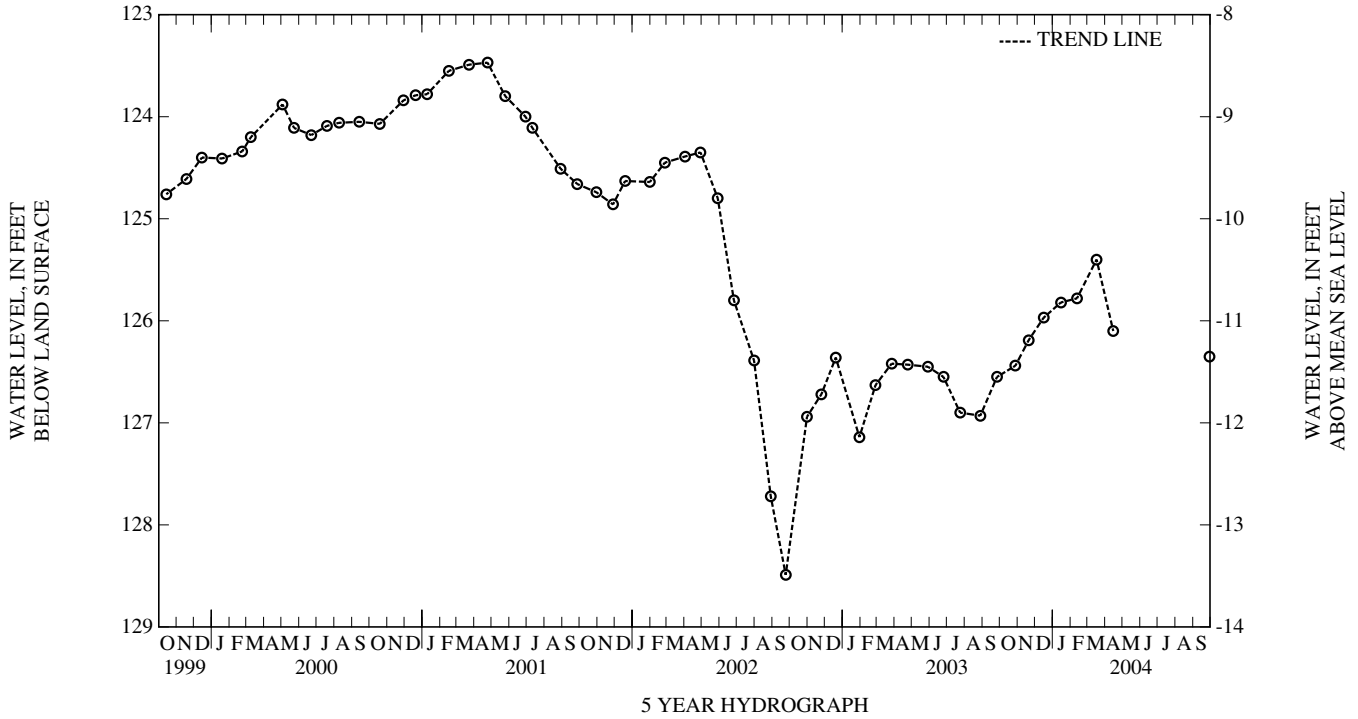
PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.06 ft below land surface, October 30, 1980; lowest measured, 128.49 ft below land surface, September 24, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	126.44	DEC 16, 2003	125.97	FEB 12, 2004	125.78	APR 15, 2004	126.10
NOV 20	126.19	JAN 15, 2004	125.82	MAR 17	125.40	SEP 29	126.35

HIGHEST 125.40 MAR 17, 2004
 LOWEST 126.44 OCT 28, 2003



5 YEAR HYDROGRAPH
 OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 63. SITE ID.--381615076364701. PERMIT NUMBER.--SM-73-3785.

LOCATION.--Lat 38°16'15", long 76°36'47", Hydrologic Unit 02070011, at Leonardtown Senior High School, Redgate. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 356 ft; casing diameter 4 in., to 327 ft; casing diameter 2 in., from 327 to 346 ft; screen diameter 2 in., from 346 to 356 ft.

INSTRUMENTATION.--Twice yearly water level measurements with electric tape by U.S. Geological Survey personnel. Monthly water level measurements from October 1977 to October 1986.

DATUM.--Elevation of land surface is 119.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.00 ft above land surface.

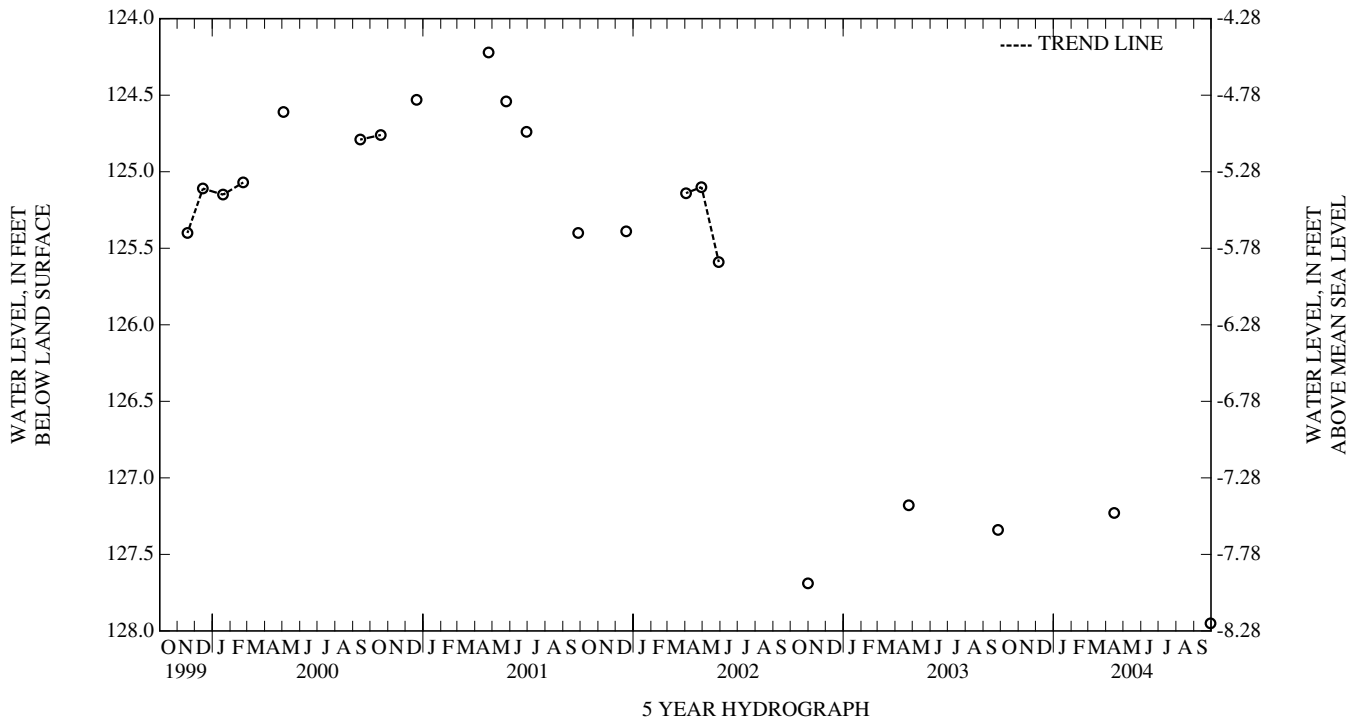
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 113.15 ft below land surface, March 2, 1981; lowest measured, 127.95 ft below land surface, September 29, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 15, 2004	127.23	SEP 29, 2004	127.95
HIGHEST 127.23 APR 15, 2004		LOWEST 127.95 SEP 29, 2004	



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 72. SITE ID.--381626076393401. PERMIT NUMBER.--SM-94-3616.

LOCATION.--Lat 38°16'26", long 76°39'34", Hydrologic Unit 02070011, at Paw Paw Hollow Lane, 1.5 mi southwest of Leonardtown. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,340 ft; casing diameter 8 in., to 60 ft; casing diameter 4 in., from +2.52 to 1,300 ft, and 1,330 to 1,340 ft; screen diameter 4 in., from 1,300 to 1,330 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval from July 2001 to current year.

DATUM.--Elevation of land surface is 109.99 ft above North American Vertical Datum of 1988. Measuring point: Top of shelter platform, 2.69 ft above land surface.

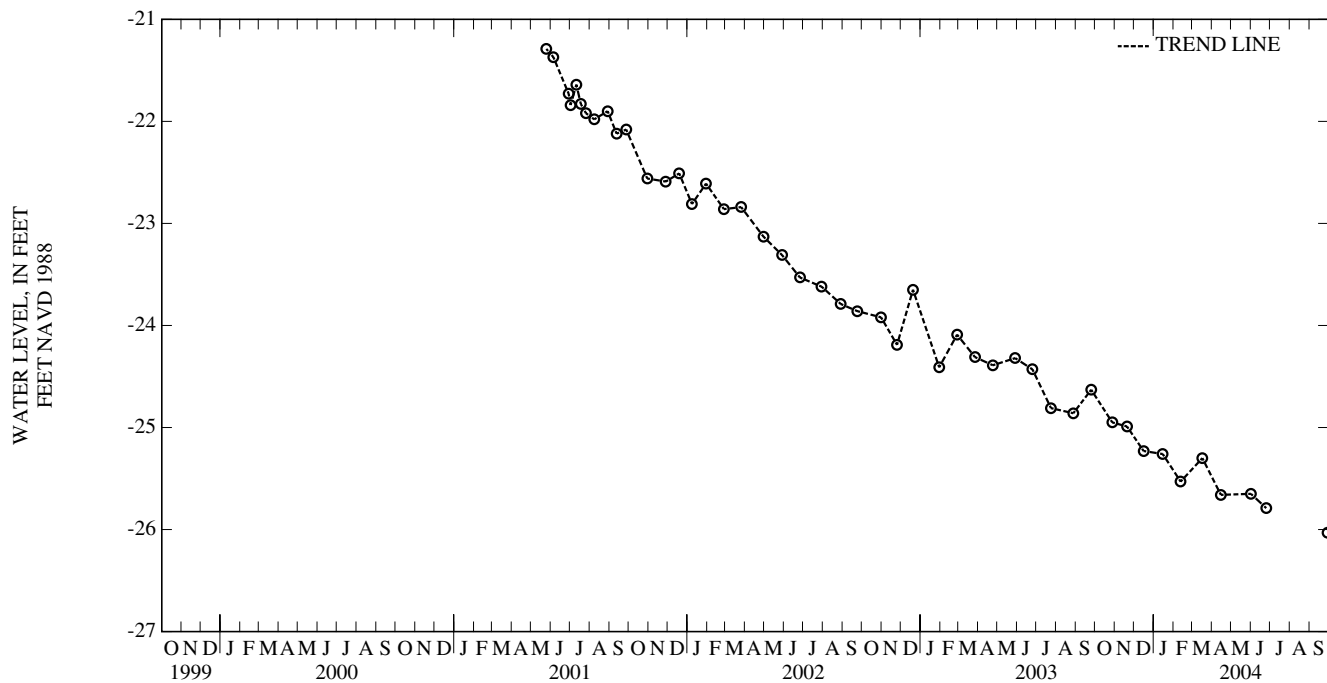
REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.43 ft below sea level, May 25, 2001; lowest measured, 24.17 ft below sea level, September 29, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	-24.95	JAN 15, 2004	-25.26	APR 15, 2004	-25.66	SEP 29, 2004	-26.03
NOV 20	-24.99	FEB 12	-25.53	JUN 01	-25.65		
DEC 16	-25.23	MAR 17	-25.30	25	-25.79		
	LOWEST -26.03	SEP 29, 2004					
	HIGHEST -24.95	OCT 28, 2003					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Df 61. PERMIT NUMBER.--SM-05-5823.

LOCATION.-- Hydrologic Unit 02060006, at Patuxent River Naval Air Test Station. Owner: U.S. Navy.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 600 ft; casing diameter 8 in., to 559 ft; casing diameter 6 in., from 540 to 580 ft; screen diameter 6 in., from 580 to 600 ft.

INSTRUMENTATION.--Monthly water level measurements with steel tape by U.S. Geological Survey personnel. Periodic water level measurements from September 1984 to September 1999. Equipped with digital water-level recorder--15-minute recording interval, September 1999 to 2004.

DATUM.--Elevation of land surface is 108.86 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 1.70 ft above land surface.

REMARKS.--Naval Air Station Patuxent River Ground Water Hydrogeology project observation/production well. The water-level on March 3, 1964 was reported as 47 ft below sea level. Water levels are affected by well being pumped and regional ground-water withdrawal. Missing data due to recorder malfunction.

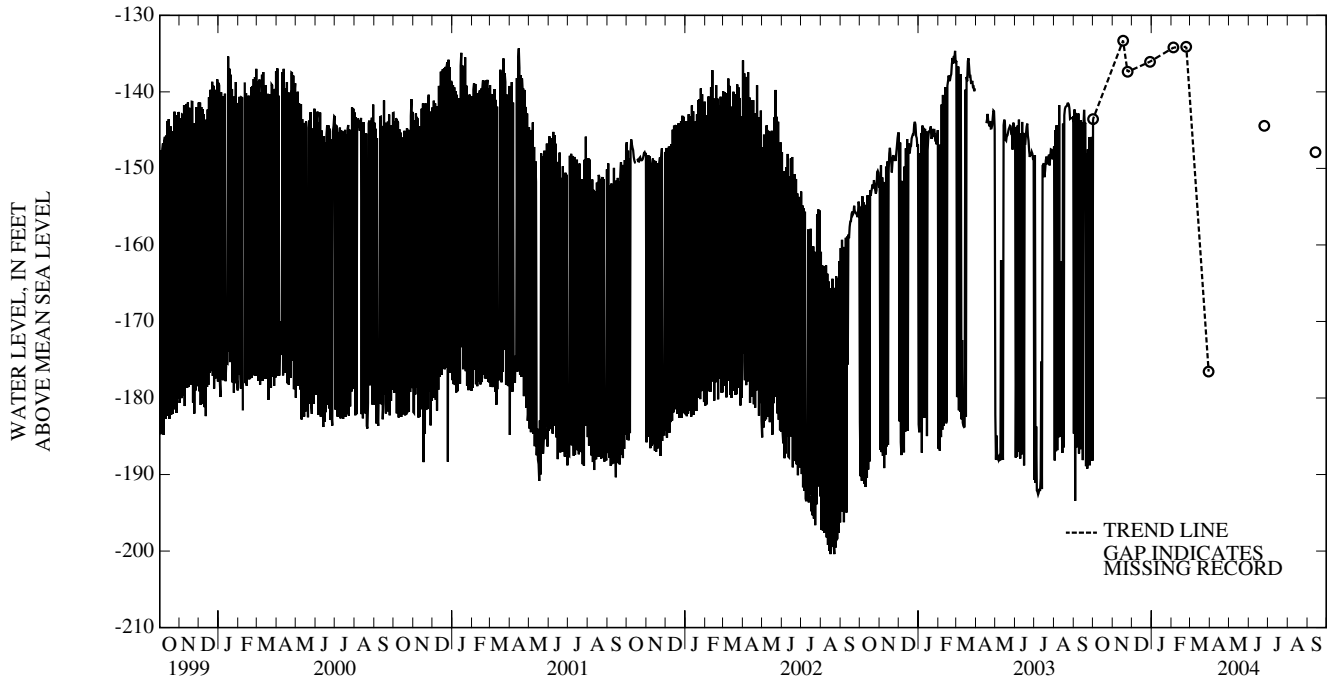
PERIOD OF RECORD.--September 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.91 ft below sea level, September 21, 1984; lowest measured, 200.40 ft below sea level, August 16 and 22, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2003	-143.56	DEC 29, 2003	-136.06	MAR 30, 2004	-176.55
NOV 17	-133.30	FEB 04, 2004	-134.21	JUN 25	-144.44
24	-137.39	24	-134.12	SEP 13	-147.89

LOWEST -176.55 MAR 30, 2004
 HIGHEST -133.30 NOV 17, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY

WELL NUMBER.--SM Df 66. SITE ID.--381841076284401. PERMIT NUMBER.--SM-73-1990.

LOCATION.--Lat 38°18'41", long 76°28'44", Hydrologic Unit 02060006, 0.8 mi south of Town Point. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 258 ft; casing diameter 6 in., to 84 ft; casing diameter 2 in., from 84 to 248 ft; screen diameter 2 in., from 248 to 258 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

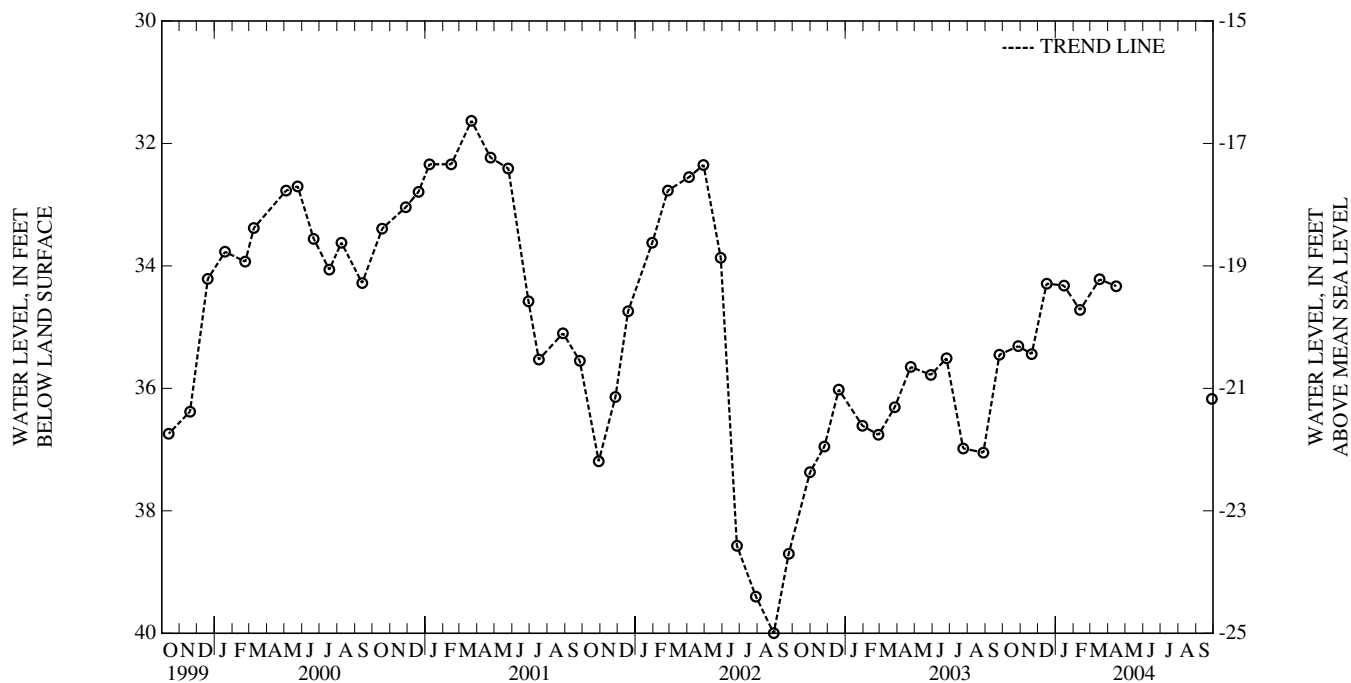
PERIOD OF RECORD.--July 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.79 ft below land surface, April 5, 1979; lowest measured, 49.66 ft below land surface, July 9, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	35.31	DEC 16, 2003	34.29	FEB 12, 2004	34.72	APR 15, 2004	34.33
NOV 20	35.44	JAN 15, 2004	34.32	MAR 17	34.22	SEP 28	36.17

HIGHEST 34.22 MAR 17, 2004
LOWEST 36.17 SEP 28, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Df 71. SITE ID.--381527076283101. PERMIT NUMBER.--SM-73-3431.

LOCATION.--Lat 38°15'27", long 76°28'31", Hydrologic Unit 02070011, at Cheryl Dr. and Great Mills Rd., Lexington Park. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 560 ft; casing diameter 4 in., to 420 ft; casing diameter 2 in., from 420 to 550 ft; screen diameter 2 in., from 550 to 560 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 69.15 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.80 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

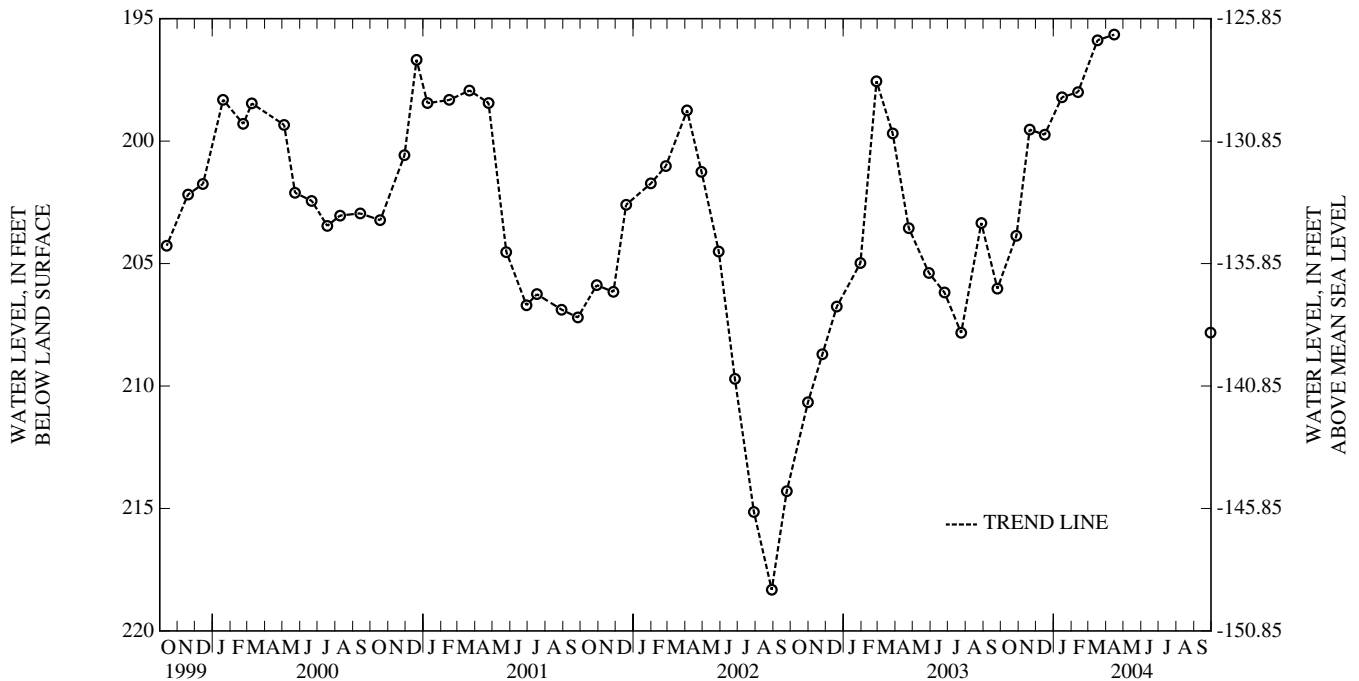
PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 119.19 ft below land surface, May 1, 1980; lowest measured, 218.32 ft below land surface, August 29, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	203.87	DEC 16, 2003	199.74	FEB 12, 2004	198.00	APR 15, 2004	195.65
NOV 20	199.53	JAN 15, 2004	198.21	MAR 17	195.88	SEP 29	207.82

HIGHEST 195.65 APR 15, 2004
 LOWEST 207.82 SEP 29, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Df 84. SITE ID.--381548076272102. PERMIT NUMBER.--SM-81-0119.

LOCATION.--Lat 38°15'48", long 76°27'21", Hydrologic Unit 0207011, at Lexington Park. Owner: Maryland Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 912 ft; casing diameter 6 in., to 246 ft; casing diameter 4 in., from 246 ft to 831 ft, 856 to 862 ft, and 867 to 897 ft; screen diameter 4 in., from 831 to 856 ft, 862 to 867 ft, and 897 to 912 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60 minute recorder interval from February 2000 to June 2004.

DATUM.--Elevation of land surface is 108.39 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.80 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network and Naval Air Station Patuxent River Ground Water Hydrology project observation well. Water levels are affected by regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.29 ft below sea level, February 3, 1983; lowest measured, 45.31 ft below sea level, July 12, 2004.

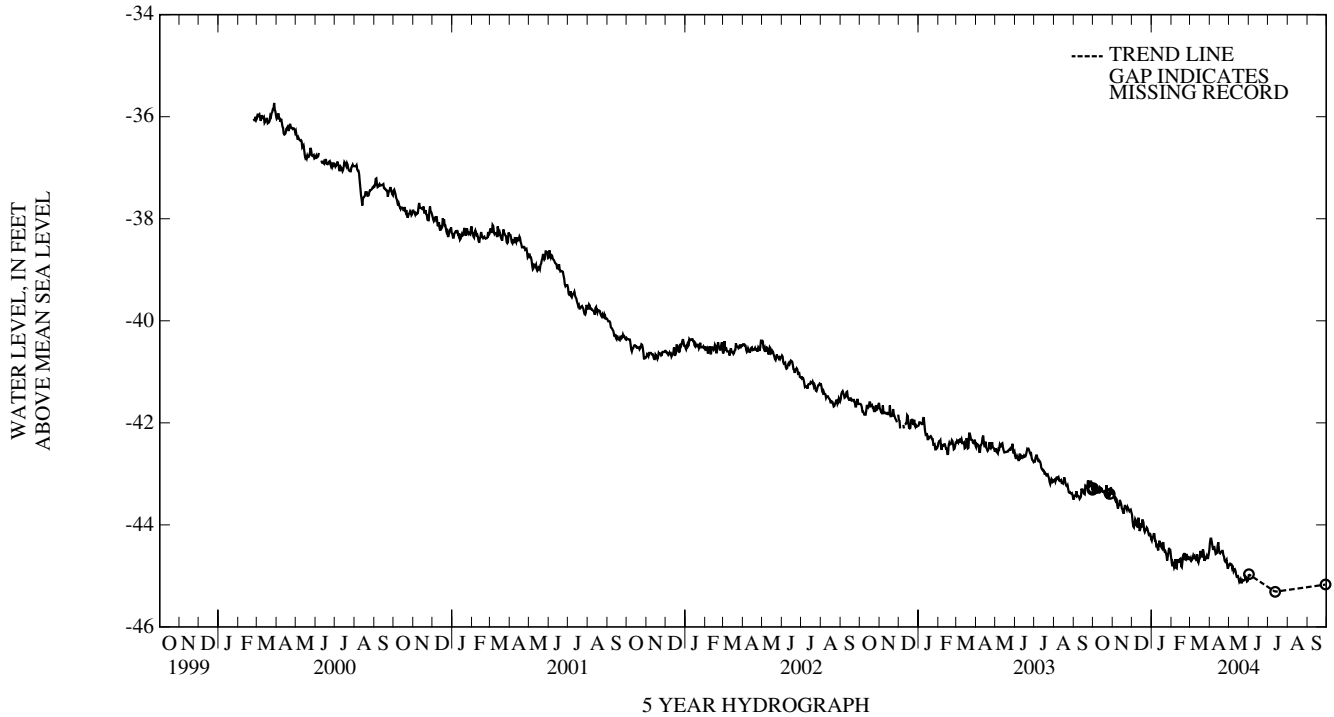
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL				
	OCT 28, 2003	-43.31	JAN 15, 2004	-44.29	MAR 17, 2004	-44.45	JUL 12, 2004	-45.31				
	NOV 20	-43.56	FEB 12	-44.69	APR 15	-44.42	SEP 29	-45.17				
	DEC 16	-44.01	23	-44.57	JUN 01	-44.97						
	LOWEST	-45.31	JUL 12, 2004									
	HIGHEST	-43.31	OCT 28, 2003									
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	-43.27	-43.28	-43.35	-43.39	-43.67	-43.80	-44.23	-44.31	-44.62	-44.72	-44.62	-44.68
2	-43.18	-43.27	-43.38	-43.41	-43.80	-43.94	-44.19	-44.25	-44.72	-44.81	-44.55	-44.65
3	-43.25	-43.35	-43.41	-43.43	-43.90	-44.03	-44.15	-44.24	-44.51	-44.74	-44.61	-44.70
4	-43.20	-43.25	-43.43	-43.49	-43.97	-44.05	-44.12	-44.18	-44.61	-44.77	-44.55	-44.68
5	-43.24	-43.28	-43.47	-43.52	-43.80	-43.97	-44.10	-44.18	-44.77	-44.84	-44.49	-44.66
6	-43.25	-43.32	-43.36	-43.48	-43.81	-43.89	-44.18	-44.31	-44.53	-44.81	-44.49	-44.60
7	-43.30	-43.34	-43.41	-43.50	-43.85	-43.92	-44.29	-44.31	-44.53	-44.67	-44.51	-44.63
8	-43.31	-43.36	-43.49	-43.62	-43.92	-44.01	-44.31	-44.41	-44.67	-44.84	-44.51	-44.61
9	-43.34	-43.36	-43.62	-43.68	-43.97	-44.02	-44.33	-44.40	-44.68	-44.85	-44.60	-44.66
10	-43.31	-43.36	-43.59	-43.62	-43.78	-44.05	-44.37	-44.45	-44.63	-44.69	-44.65	-44.68
11	-43.28	-43.36	-43.47	-43.61	-43.72	-43.86	-44.31	-44.50	-44.64	-44.69	-44.48	-44.66
12	-43.25	-43.28	-43.39	-43.51	-43.86	-44.03	-44.23	-44.37	-44.64	-44.74	-44.48	-44.58
13	-43.26	-43.30	-43.39	-43.55	-44.03	-44.12	-44.25	-44.31	-44.61	-44.69	-44.58	-44.71
14	-43.09	-43.29	-43.55	-43.59	-43.77	-44.08	-44.25	-44.43	-44.56	-44.67	-44.58	-44.74
15	-43.08	-43.32	-43.58	-43.67	-43.77	-43.97	-44.19	-44.35	-44.56	-44.66	-44.57	-44.67
16	-43.29	-43.35	-43.64	-43.70	-43.91	-44.05	-44.35	-44.44	-44.64	-44.81	-44.47	-44.66
17	-43.31	-43.35	-43.64	-43.75	-43.80	-43.91	-44.36	-44.46	-44.72	-44.83	-44.47	-44.51
18	-43.34	-43.34	-43.65	-43.78	-43.84	-43.91	-44.07	-44.37	-44.59	-44.72	-44.48	-44.57
19	-43.33	-43.35	-43.47	-43.68	-43.89	-43.96	-44.23	-44.34	-44.54	-44.62	-44.48	-44.62
20	-43.33	-43.42	-43.47	-43.61	-43.96	-44.10	-44.34	-44.48	-44.49	-44.64	-44.40	-44.62
21	-43.15	-43.34	-43.59	-43.66	-44.05	-44.14	-44.40	-44.52	-44.42	-44.55	-44.38	-44.48
22	-43.16	-43.23	-43.64	-43.66	-43.97	-44.11	-44.37	-44.51	-44.55	-44.67	-44.48	-44.53
23	-43.23	-43.32	-43.64	-43.70	-44.02	-44.09	-44.49	-44.55	-44.57	-44.68	-44.53	-44.70
24	-43.31	-43.47	-43.56	-43.65	-43.91	-44.05	-44.47	-44.60	-44.50	-44.57	-44.58	-44.64
25	-43.45	-43.47	-43.61	-43.68	-44.01	-44.07	-44.60	-44.70	-44.53	-44.61	-44.58	-44.67
26	-43.39	-43.46	-43.64	-43.70	-44.07	-44.12	-44.53	-44.62	-44.58	-44.69	-44.58	-44.65
27	-43.21	-43.39	-43.66	-43.73	-44.08	-44.18	-44.35	-44.55	-44.57	-44.61	-44.56	-44.61
28	-43.24	-43.33	-43.50	-43.71	-44.11	-44.22	-44.38	-44.45	-44.59	-44.66	-44.57	-44.65
29	-43.18	-43.26	-43.52	-43.70	-44.06	-44.16	-44.41	-44.50	-44.62	-44.66	-44.58	-44.65
30	-43.26	-43.39	-43.67	-43.75	-44.05	-44.20	-44.42	-44.50	---	---	-44.50	-44.58
31	-43.37	-43.39	---	---	-44.18	-44.28	-44.50	-44.62	---	---	-44.35	-44.50
MONTH	-43.08	-43.47	-43.35	-43.78	-43.67	-44.28	-44.07	-44.70	-44.42	-44.85	-44.35	-44.74

ST. MARYS COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-44.25	-44.35	-44.75	-44.78	---	---	---	---	---	---	---	---
2	-44.25	-44.27	-44.66	-44.76	---	---	---	---	---	---	---	---
3	-44.26	-44.27	-44.66	-44.76	---	---	---	---	---	---	---	---
4	-44.27	-44.34	-44.72	-44.78	---	---	---	---	---	---	---	---
5	-44.33	-44.42	-44.76	-44.78	---	---	---	---	---	---	---	---
6	-44.41	-44.49	-44.78	-44.86	---	---	---	---	---	---	---	---
7	-44.40	-44.45	-44.80	-44.84	---	---	---	---	---	---	---	---
8	-44.37	-44.44	-44.80	-44.91	---	---	---	---	---	---	---	---
9	-44.40	-44.51	-44.82	-44.88	---	---	---	---	---	---	---	---
10	-44.51	-44.57	-44.82	-44.87	---	---	---	---	---	---	---	---
11	-44.53	-44.56	-44.87	-44.90	---	---	---	---	---	---	---	---
12	-44.40	-44.55	-44.88	-44.97	---	---	---	---	---	---	---	---
13	-44.25	-44.41	-44.95	-45.02	---	---	---	---	---	---	---	---
14	-44.28	-44.34	-44.91	-45.02	---	---	---	---	---	---	---	---
15	-44.34	-44.47	-44.92	-45.01	---	---	---	---	---	---	---	---
16	-44.47	-44.55	-45.00	-45.06	---	---	---	---	---	---	---	---
17	-44.45	-44.56	-45.03	-45.12	---	---	---	---	---	---	---	---
18	-44.47	-44.54	-45.05	-45.10	---	---	---	---	---	---	---	---
19	-44.44	-44.53	-45.01	-45.07	---	---	---	---	---	---	---	---
20	-44.45	-44.51	-45.02	-45.13	---	---	---	---	---	---	---	---
21	-44.50	-44.51	-45.07	-45.13	---	---	---	---	---	---	---	---
22	-44.51	-44.59	-45.03	-45.08	---	---	---	---	---	---	---	---
23	-44.58	-44.62	-45.02	-45.09	---	---	---	---	---	---	---	---
24	-44.62	-44.70	-45.01	-45.09	---	---	---	---	---	---	---	---
25	-44.69	-44.72	-45.02	-45.08	---	---	---	---	---	---	---	---
26	-44.60	-44.70	-44.98	-45.07	---	---	---	---	---	---	---	---
27	-44.60	-44.68	-44.99	-45.02	---	---	---	---	---	---	---	---
28	-44.68	-44.79	-45.01	-45.04	---	---	---	---	---	---	---	---
29	-44.79	-44.86	-45.03	-45.11	---	---	---	---	---	---	---	---
30	-44.75	-44.82	-45.03	-45.10	---	---	---	---	---	---	---	---
31	---	---	-44.88	-45.04	---	---	---	---	---	---	---	---
MONTH	-44.25	-44.86	-44.66	-45.13	---	---	---	---	---	---	---	---
YEAR	-43.08	-45.13										

Daily Low Water Levels



ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Df 100. PERMIT NUMBER.--SM-94-3113.

LOCATION.-- Hydrologic Unit 0206006, at Patuxent River Naval Air Test Station. Owner: U.S. Navy.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 910 ft; casing diameter 10 in., to 706 ft; casing diameter 8 in., from 716 ft to 744 ft, 754 to 835 ft, 860 to 882 ft, 892 to 900 ft, and 905 to 910 ft; screen diameter 8 in., from 706 to 716 ft, 744 to 754 ft, 835 to 860 ft, 882 to 892 ft, and 900 to 905 ft.

INSTRUMENTATION.--Monthly water level measurements with steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recording interval, February 2001 to 2004.

DATUM.--Elevation of land surface is 21 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of sanitary cap, 2.05 ft above land surface.

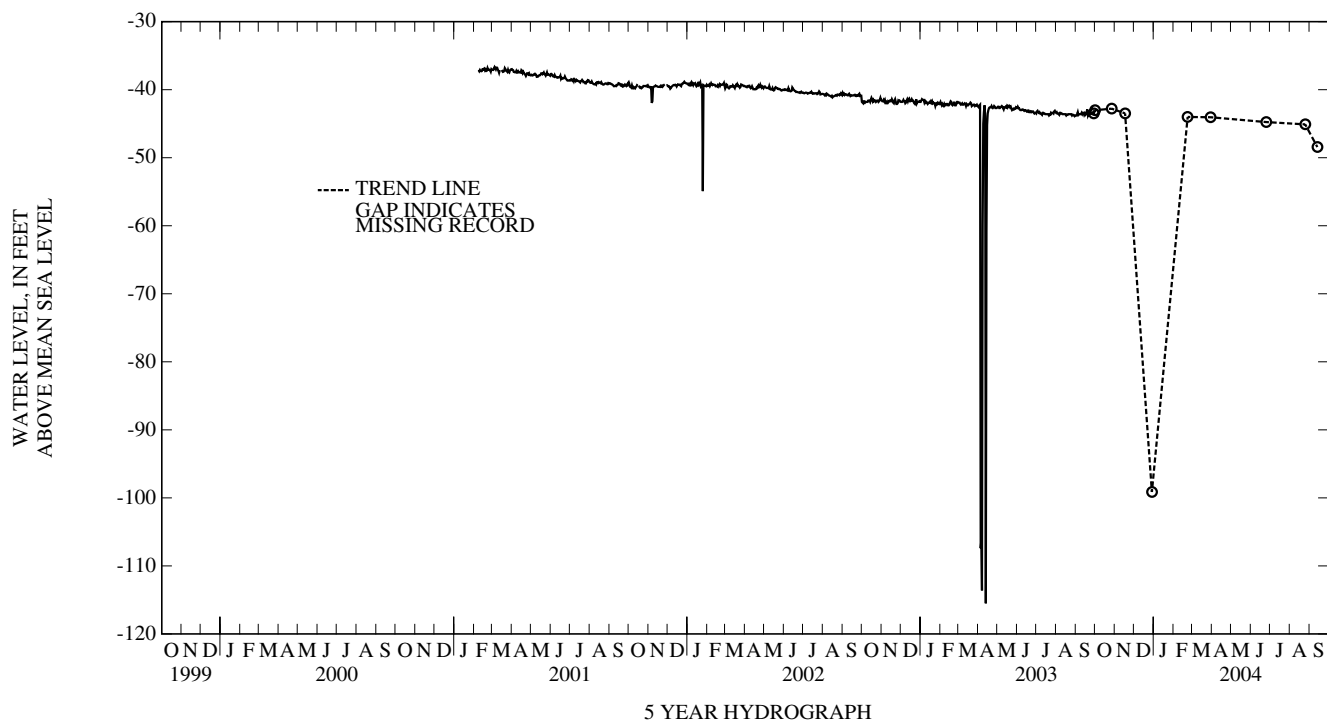
REMARKS.--Naval Air Station Patuxent River Ground Water Hydrology project observation/production well. Water levels are affected by this well being pumped as a production well, and regional ground-water withdrawal. Missing data due to recorder malfunction. A pump test was performed from April 5, 2003 to April 7, 2003, and on April 13, 2003. Well also had been pumped December 29, 2003.

PERIOD OF RECORD.--September 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.10 ft below sea level, March 5, 2001 (recorder); lowest measured, 115.50 ft below sea level, April 13, 2003 (recorder) - see REMARKS.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2003	-43.02	DEC 29, 2003	-99.14	JUN 25, 2004	-44.76
27	-42.79	FEB 23, 2004	-44.01	AUG 25	-45.10
NOV 17	-43.48	MAR 30	-44.05	SEP 13	-48.43
LOWEST -99.14 DEC 29, 2003					
HIGHEST -42.79 OCT 27, 2003					



ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dg 14. PERMIT NUMBER.--SM-92-0370.

LOCATION.-- Hydrologic Unit 02060006, at Patuxent River Naval Air Test Station. Owner: U.S. Navy.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 542 ft; casing diameter 8 in., to 490 ft, and casing diameter 6 in., from 540 to 542 ft; screen diameter 6 in., from 490 to 540 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recording interval, September 1999 to 2004.

DATUM.--Elevation of land surface is 19.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.20 ft above land surface.

REMARKS.--Naval Air Station Patuxent River Ground Water Hydrogeology project observation/production well. The water-level on April 22, 1994 was reported at 71 ft below sea level. Water levels are affected by this well being pumped as a production well and regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--September 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 95.30 ft below sea level, April 29, 1996; lowest measured, 196.61 ft below sea level, January 29, 2003 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	-126.82	DEC 29, 2003	-121.20	MAR 31, 2004	-118.00	SEP 13, 2004	-130.04
NOV 17	-124.85	FEB 04, 2004	-120.16	JUN 17	-122.83		
24	-123.34	24	-118.85	AUG 25	-124.71		

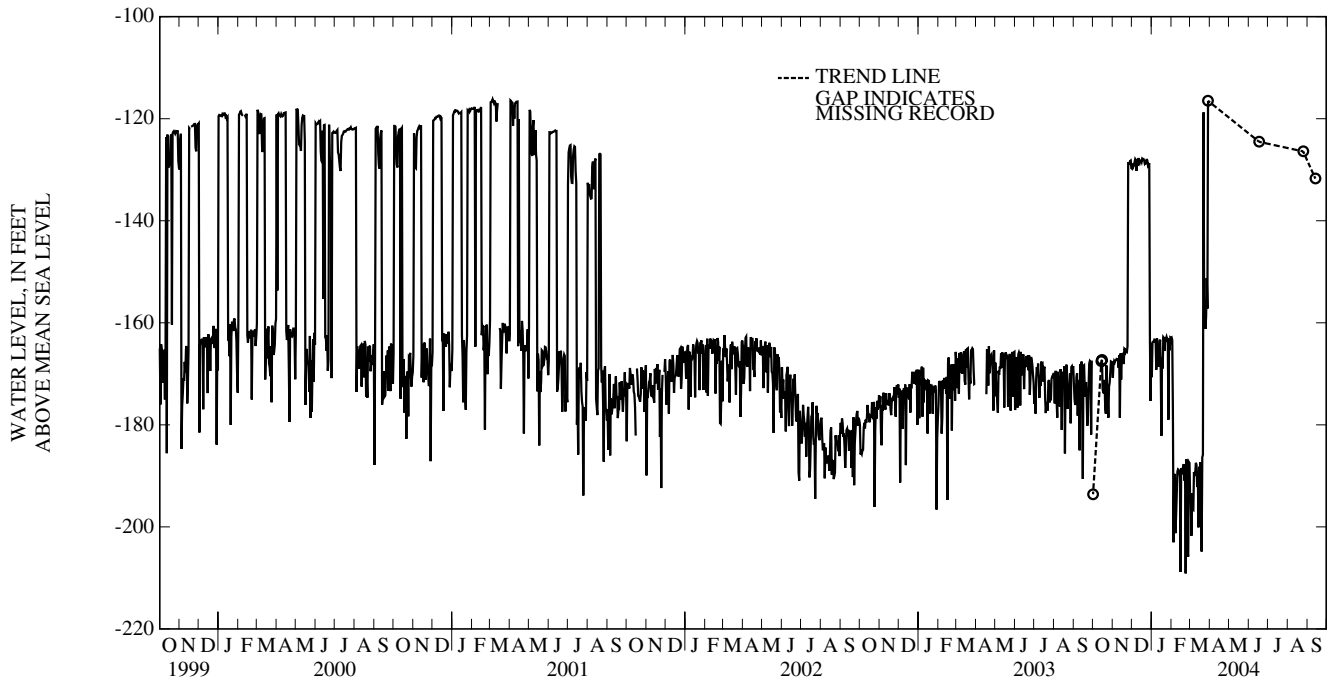
LOWEST -130.04 SEP 13, 2004
 HIGHEST -118.00 MAR 31, 2004

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	-126.0	-193.6	-125.4	-170.8	-122.3	-129.8	-121.6	-170.7	-120.5	-162.9	-118.8	-194.9
2	---	---	-125.3	-168.1	-122.6	-128.8	-121.2	-163.9	-120.3	-163.4	-118.8	-194.2
3	---	---	-125.0	-167.5	-122.7	-129.4	-121.0	-163.7	-120.0	-176.9	-119.0	-201.7
4	---	---	-125.0	-167.8	-122.5	-129.1	-120.9	-163.7	-120.0	-203.0	-119.2	-193.4
5	---	---	-124.6	-167.4	-122.0	-128.5	-120.8	-163.3	-121.1	-189.9	-120.1	-196.6
6	---	---	-124.6	-167.3	-121.9	-127.9	-120.8	-163.3	-121.0	-189.6	-121.4	-196.7
7	---	---	-124.8	-167.1	-122.0	-128.1	-120.9	-163.5	-120.8	-201.2	-120.7	-189.2
8	---	---	-124.8	-167.1	-122.1	-130.2	-121.2	-169.2	-120.7	-198.0	-120.3	-190.0
9	---	---	-124.8	-167.3	-122.1	-128.5	-121.2	-163.0	-120.9	-193.8	-119.6	-189.3
10	---	---	-124.5	-168.8	-121.6	-129.2	-121.0	-163.5	-120.9	-189.2	-119.0	-187.4
11	---	---	-124.3	-166.4	-121.3	-127.7	-120.8	-168.6	-120.5	-188.7	-119.0	-187.9
12	---	---	-124.0	-178.6	-122.0	-128.4	-120.6	-166.7	-120.3	-188.8	-118.3	-192.2
13	---	---	-123.7	-166.0	-122.4	-128.7	-121.0	-164.7	-120.2	-189.2	-119.2	-189.1
14	-124.6	-167.5	-124.7	-171.1	-121.6	-128.2	-120.6	-163.3	-120.2	-190.3	-119.5	-200.1
15	-124.3	-167.3	-124.6	-167.0	-121.6	-128.2	-120.3	-169.7	-120.0	-208.8	-119.3	-188.2
16	-125.5	-173.0	-123.9	-166.4	-122.1	-128.5	-120.7	-182.2	-119.5	-188.5	-118.6	-191.6
17	-127.2	-173.7	-123.5	-165.9	-121.6	-127.8	-121.1	-166.8	-119.5	-189.7	-118.0	-187.3
18	-126.2	-173.7	-123.1	-168.1	-121.6	-127.9	-120.4	-168.9	-119.4	-188.6	-118.0	-189.2
19	-126.1	-171.2	-122.4	-165.1	-121.8	-127.9	-120.4	-162.8	-119.1	-188.4	-117.9	-204.8
20	-126.2	-176.5	-122.5	-165.2	-121.8	-128.2	-120.4	-163.0	-118.9	-187.7	-118.0	-186.3
21	-125.8	-177.8	-122.9	-165.8	-122.3	-128.8	-120.7	-165.5	-118.7	-190.9	-117.7	-185.9
22	-125.5	-168.4	-122.9	-165.6	-122.3	-128.6	-120.6	-163.2	-118.9	-188.0	-117.8	-118.8
23	-125.5	-172.3	-122.7	-165.7	-122.2	-128.9	-120.4	-163.1	-119.0	-209.1	-115.6	-161.0
24	-126.1	-175.0	-122.2	-164.6	-121.9	-127.9	-120.2	-162.8	-118.5	-186.8	-116.3	-156.3
25	-127.7	-178.6	-122.3	-128.7	-121.9	-128.2	-120.5	-163.2	-119.1	-188.4	-117.2	-161.2
26	-127.2	-172.5	-122.3	-128.7	-122.1	-129.2	-120.2	-163.0	-119.0	-205.0	-116.0	-158.8
27	-126.1	-171.8	-122.6	-128.8	-122.3	-129.0	-119.8	-179.0	-118.8	-205.8	-113.9	-151.2
28	-125.7	-169.8	-121.8	-128.3	-122.2	-128.7	-120.0	-163.2	-118.9	-187.3	-114.3	-157.2
29	-125.3	-167.6	-121.8	-128.2	-120.9	-162.7	-120.2	-165.4	-119.0	-187.5	-114.0	-116.5
30	-125.3	-167.7	-122.3	-129.7	-121.4	-175.3	-120.5	-162.9	---	---	---	---
31	-125.6	-167.8	---	---	-121.5	-164.0	-120.8	-163.0	---	---	---	---
MONTH	-124.3	-193.6	-121.8	-178.6	-120.9	-175.3	-119.8	-182.2	-118.5	-209.1	-113.9	-204.8

ST. MARYS COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	-113.9	-209.1										

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dg 21. PERMIT NUMBER.--SM-94-0074.

LOCATION.-- Hydrologic Unit 02060006, at Patuxent River Naval Air Test Station. Owner: U.S. Navy.

AQUIFER.--Piney Point Formation of Upper Eocene age and the Nanjemoy Formation of Lower Eocene age. Aquifer code: 124PNPN, 124NNJM.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 315 ft; casing diameter 4 in., to 295 ft; screen diameter 4 in., from 295 to 315 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recording interval, February 2000 to 2003.

DATUM.--Elevation of land surface is 3 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 1.70 ft above land surface.

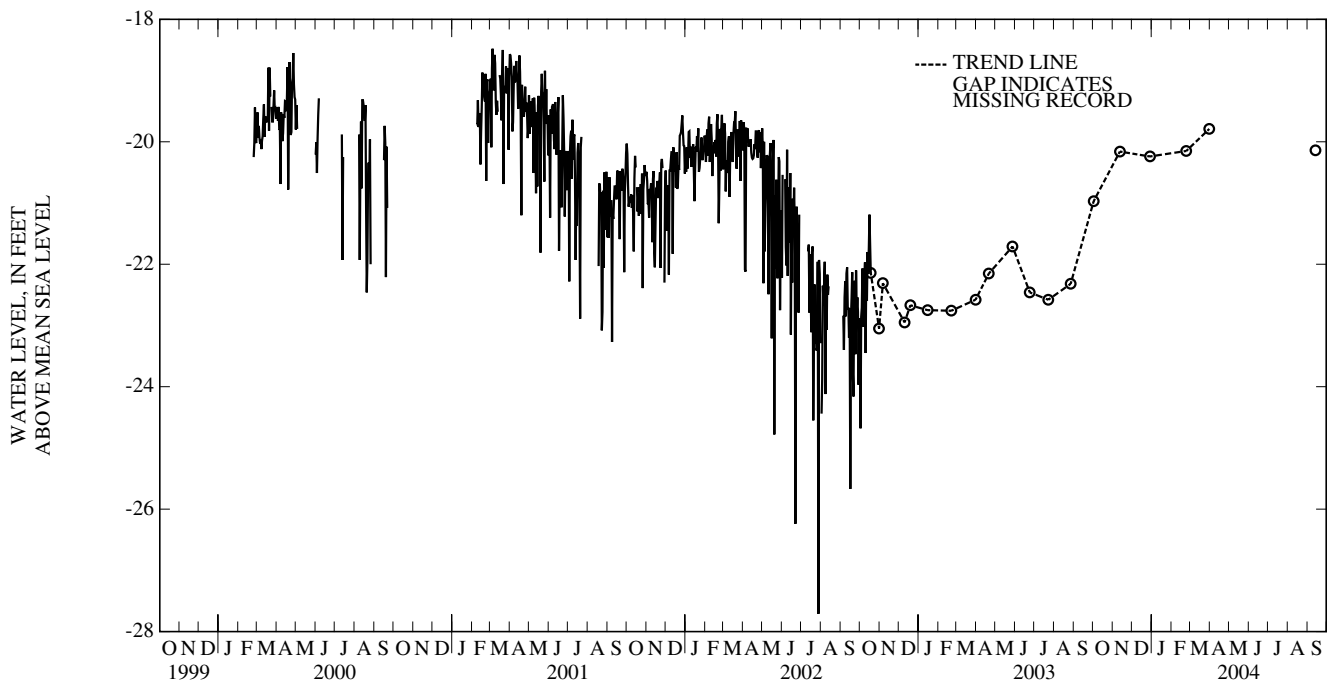
REMARKS.--Naval Air Station Patuxent River Ground Water Hydrogeology project observation/production well. Water levels are affected by this well being used as a production well, and regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--February 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.14 ft below sea level, March 5, 2001 (recorder); lowest measured, 27.71 ft below sea level, July 28, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 2003	-20.97	DEC 29, 2003	-20.24	MAR 31, 2004	-19.79
NOV 12	-20.16	FEB 24, 2004	-20.15	SEP 13	-20.14
LOWEST -20.97 OCT 02, 2003					
HIGHEST -19.79 MAR 31, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Eg 27. SITE ID.--381213076222801. PERMIT NUMBER.--SM-73-1993.

LOCATION.--Lat 38°12'13", long 76°22'28", Hydrologic Unit 02060004, 1.6 miles east of St. James, at the St. Marys Co. Environmental Studies Area. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 320 ft; casing diameter 6 in., to 70 ft; casing diameter 2 in., from 70 to 310 ft; screen diameter 2 in., from 310 to 320 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.50 ft above land surface.

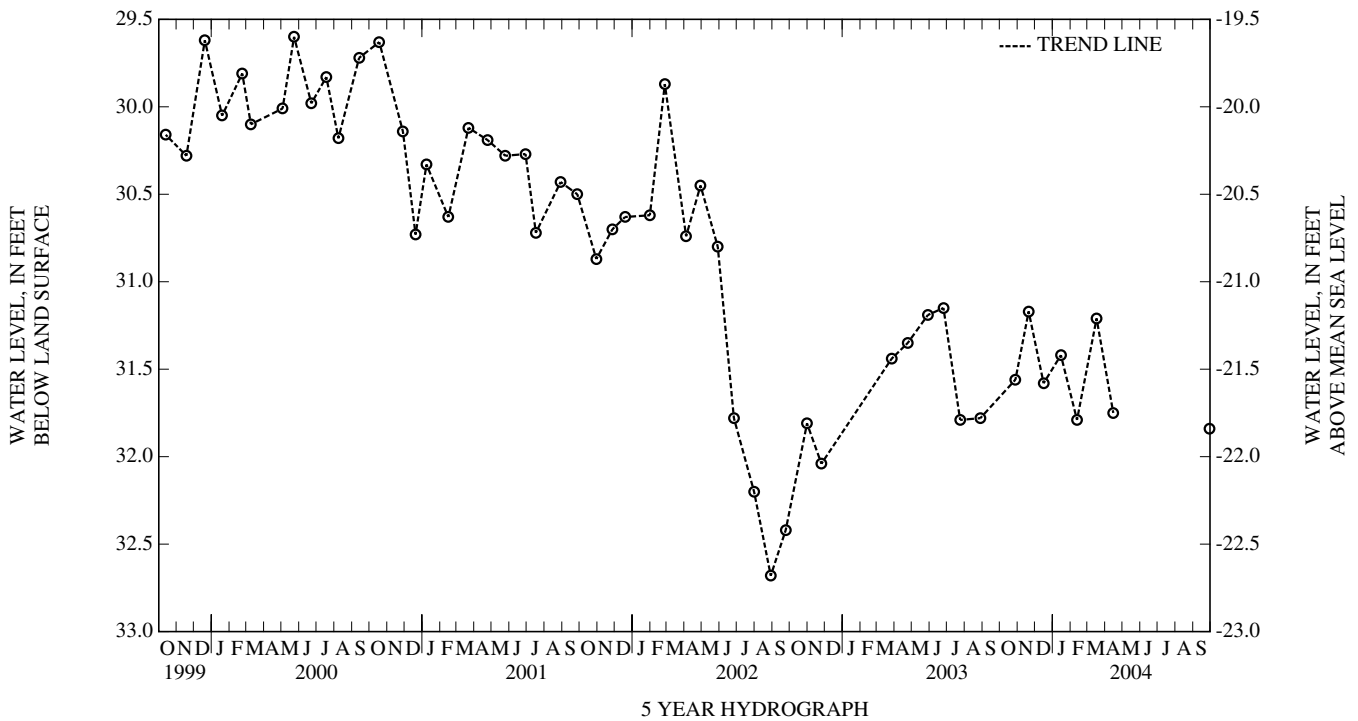
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.84 ft below land surface, May 12, 1978; lowest measured, 32.68 ft below land surface, August 29, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	31.56	DEC 16, 2003	31.58	FEB 12, 2004	31.79	APR 15, 2004	31.75
NOV 20	31.17	JAN 15, 2004	31.42	MAR 17	31.21	SEP 29	31.84
HIGHEST 31.17 NOV 20, 2003							
LOWEST 31.84 SEP 29, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Fe 30. SITE ID.--380834076303401. PERMIT NUMBER.--SM-73-1917.

LOCATION.--Lat 38°08'34", long 76°30'34", Hydrologic Unit 02070011, St. Mary's Co. Metropolitan Commission Facility, Piney Point. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 270 ft; casing diameter 6 in., to 67 ft; casing diameter 2 in., from 67 to 260 ft; screen diameter 2 in., from 260 to 270 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from October 1988 to October 1994.

DATUM.--Elevation of land surface is 9 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.7 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

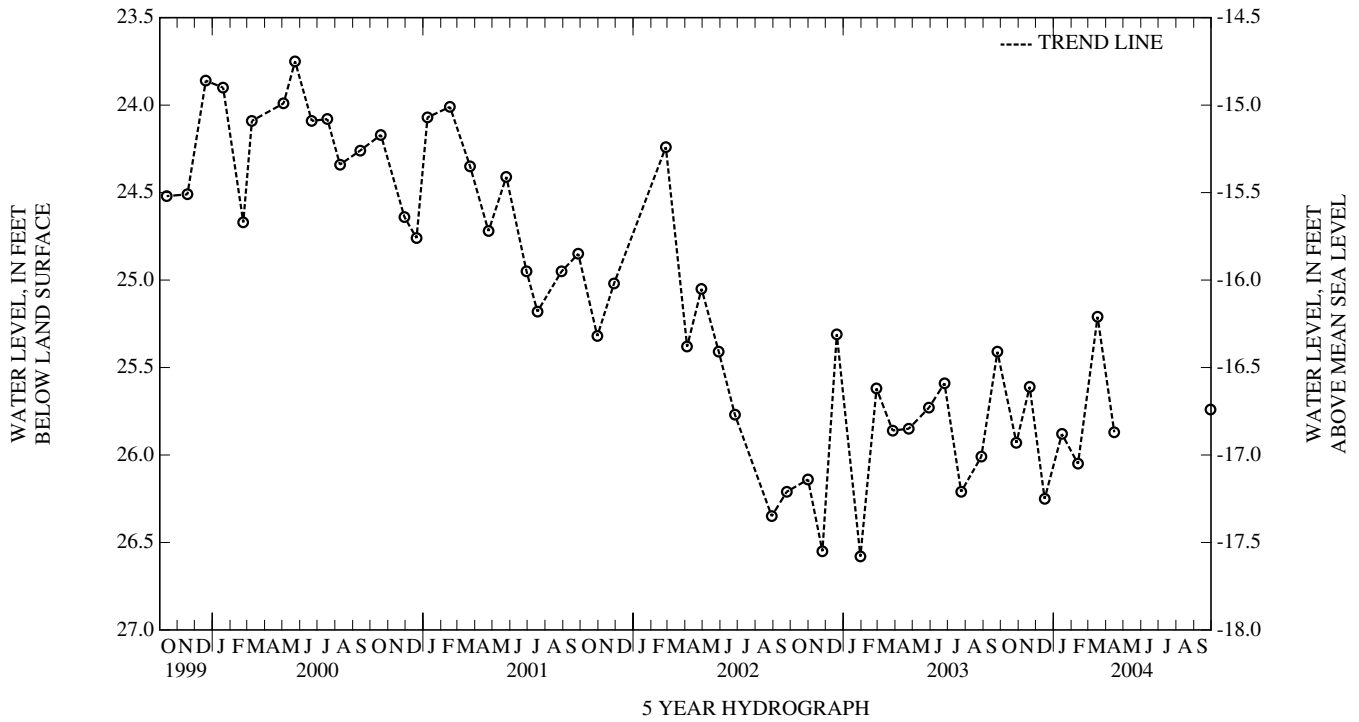
PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.24 ft below land surface, October 6, 1976; lowest measured, 26.58 ft below land surface, January 30, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	25.93	DEC 16, 2003	26.25	FEB 12, 2004	26.05	APR 15, 2004	25.87
NOV 20	25.61	JAN 15, 2004	25.88	MAR 17	25.21	SEP 29	25.74

HIGHEST 25.21 MAR 17, 2004
 LOWEST 26.25 DEC 16, 2003



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Fe 31. SITE ID.--380834076303402. PERMIT NUMBER.--SM-73-3088.

LOCATION.--Lat 38°08'34", long 76°30'34", Hydrologic Unit 02070011, St. Mary's Co. Metropolitan Commission Facility, Piney Point. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 639 ft; casing diameter 4 in., to 171 ft; casing diameter 2 in., from 171 to 451 ft; screen diameter 3 in., from 451 to 461 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 8 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

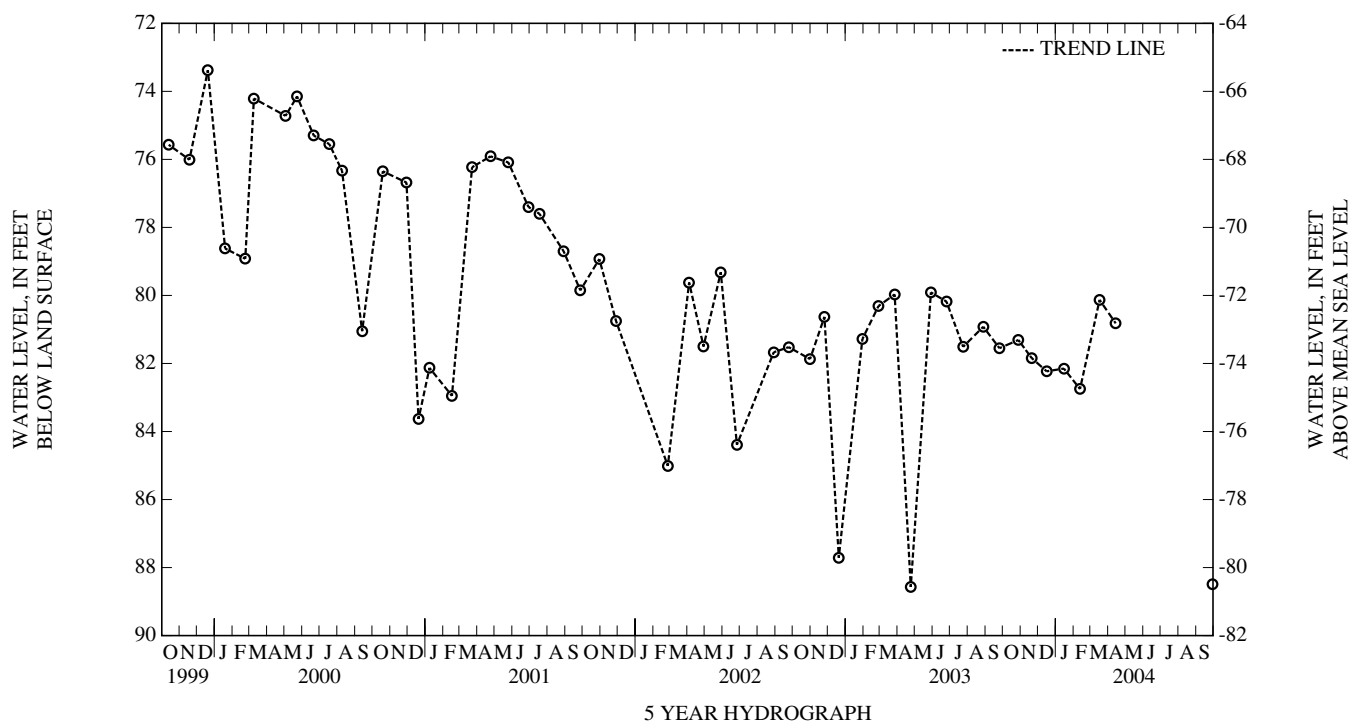
PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.77 ft below land surface, December 5, 1978; lowest measured, 88.57 ft below land surface, April 24, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	81.31	DEC 16, 2003	82.23	FEB 12, 2004	82.75	APR 14, 2004	80.82
NOV 20	81.84	JAN 15, 2004	82.15	MAR 17	80.13	SEP 29	88.49

HIGHEST 80.13 MAR 17, 2004
LOWEST 88.49 SEP 29, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Ff 36. SITE ID.--380724076251901. PERMIT NUMBER.--SM-73-1478.

LOCATION.--Lat 38°07'23", long 76°25'20", Hydrologic Unit 02070011, near Kitts Point. Owner: Jesuit Order.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, depth 618 ft; casing diameter 8 in., to 545 ft, and casing diameter 6 in., from 545 to 594 ft; screen diameter 6 in., from 594 to 618 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from September 1982 to September 1996.

DATUM.--Elevation of land surface is 5.50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land surface.

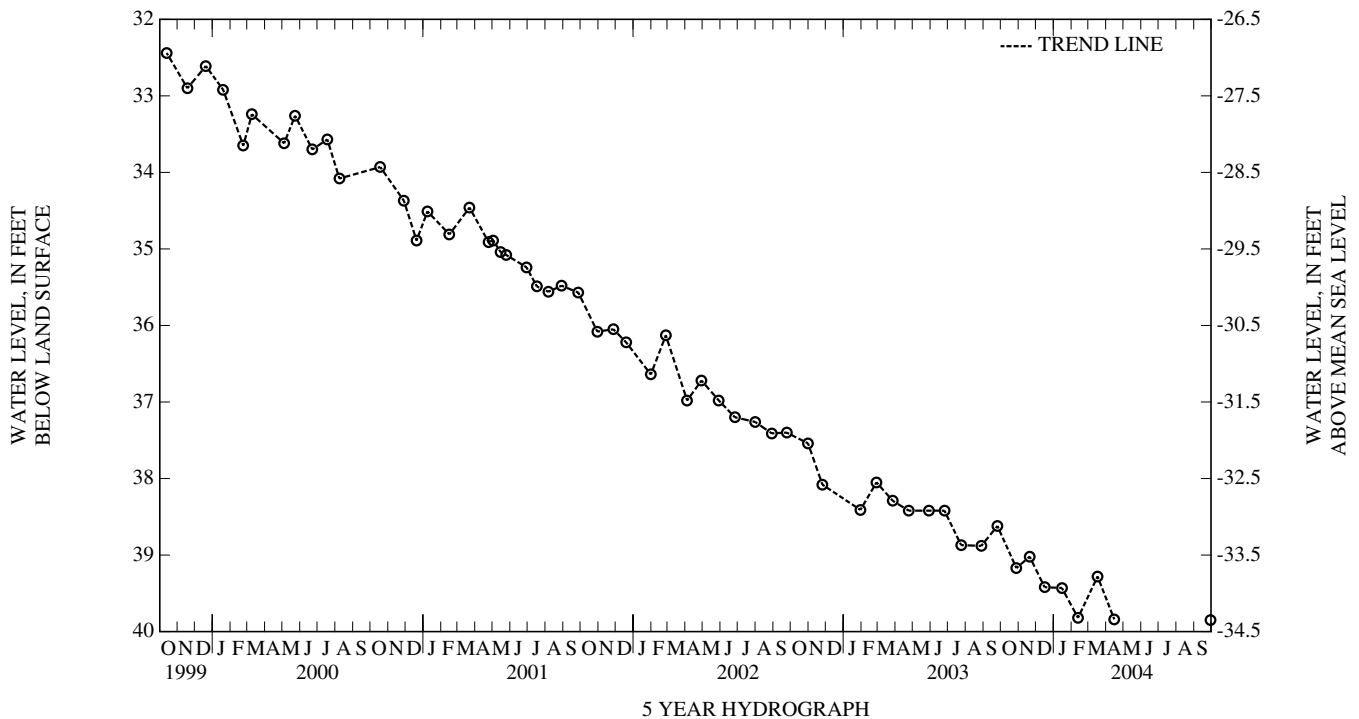
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--November 1978, September 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.80 ft below land surface, November 14, 1978; lowest measured, 39.85 ft below land surface, September 29, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	39.17	DEC 16, 2003	39.42	FEB 12, 2004	39.82	APR 15, 2004	39.84
NOV 20	39.02	JAN 15, 2004	39.43	MAR 17	39.28	SEP 29	39.85
HIGHEST 39.02 NOV 20, 2003							
LOWEST 39.85 SEP 29, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Ff 64.

LOCATION.-- Hydrologic Unit 02070007, at Webster Field. Owner: U.S. Navy.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 534 ft; casing depth unknown.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, September 1999 to 2004.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 3.00 ft above land surface.

REMARKS.--Naval Air Station Patuxent River Ground Water Hydrogeology project observation well. Water levels are affected by nearby production well and regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--September 1998 to current year.

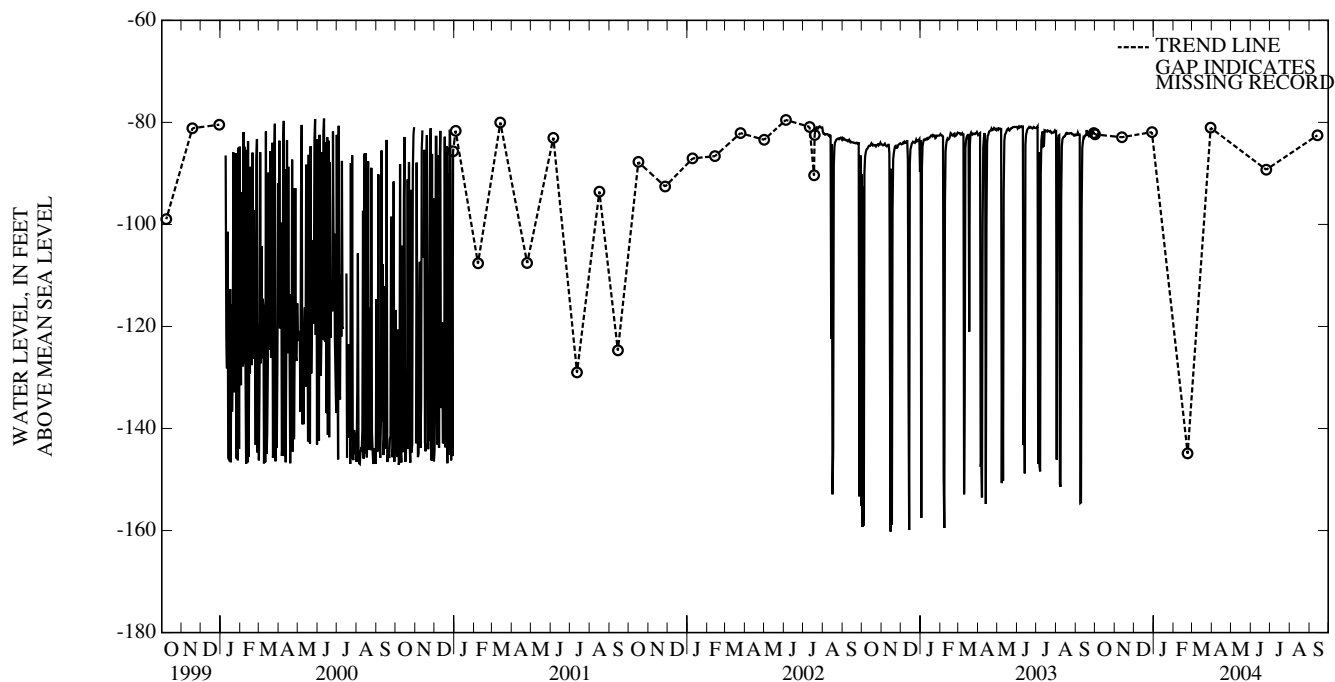
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 76.64 ft below sea level, September 3, 1998; lowest measured, 160.20 ft below sea level, November 15, 2002 (recorder).

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2003	-82.36	DEC 29, 2003	-81.91	MAR 30, 2004	-81.06	SEP 13, 2004	-82.53
NOV 12	-82.91	FEB 23, 2004	-144.90	JUN 25	-89.28		

LOWEST -144.90 FEB 23, 2004
 HIGHEST -81.06 MAR 30, 2004

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Fg 45. SITE ID.--380711076222201. PERMIT NUMBER.--SM-04-5190.

LOCATION.--Lat 38°07'11", long 76°22'22", Hydrologic Unit 02070011, in Ridge Volunteer Fire Department pumphouse, at Ridge. Owner: Ridge Volunteer Fire Department.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 436 ft; casing diameter 6 in., to 386 ft; casing diameter 4 in., from 415 to 436 ft; screen diameter 5 in., from 386 to 415 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Hole in sanitary seal, 0.55 ft above land surface.

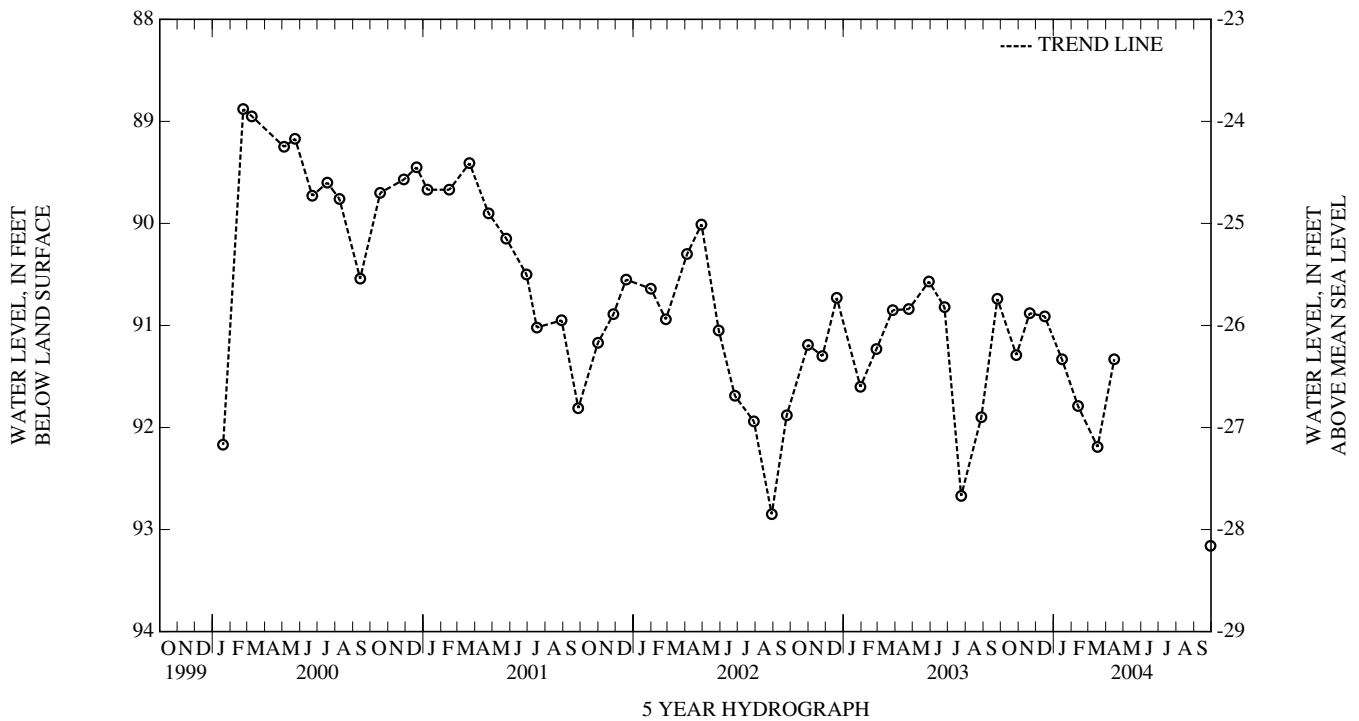
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--May 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.83 ft below land surface, May 16, 1967; lowest measured, 93.16 ft below land surface, September 29, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	91.29	DEC 16, 2003	90.91	FEB 12, 2004	91.79	APR 15, 2004	91.33
NOV 20	90.88	JAN 15, 2004	91.33	MAR 17	92.19	SEP 29	93.16
HIGHEST 90.88 NOV 20, 2003							
LOWEST 93.16 SEP 29, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SOMERSET COUNTY

WELL NUMBER.--SO Be 42. SITE ID.--381156075412501.

LOCATION.--Lat 38°11'56", long 75°41'25", Hydrologic Unit 02060009, 0.1 mi northeast of US Rt. 13 and Hampton Ave., Princess Anne. Owner: Private Residence.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, measured depth 184 ft; casing diameter 2 in., to unknown depth.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.28 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

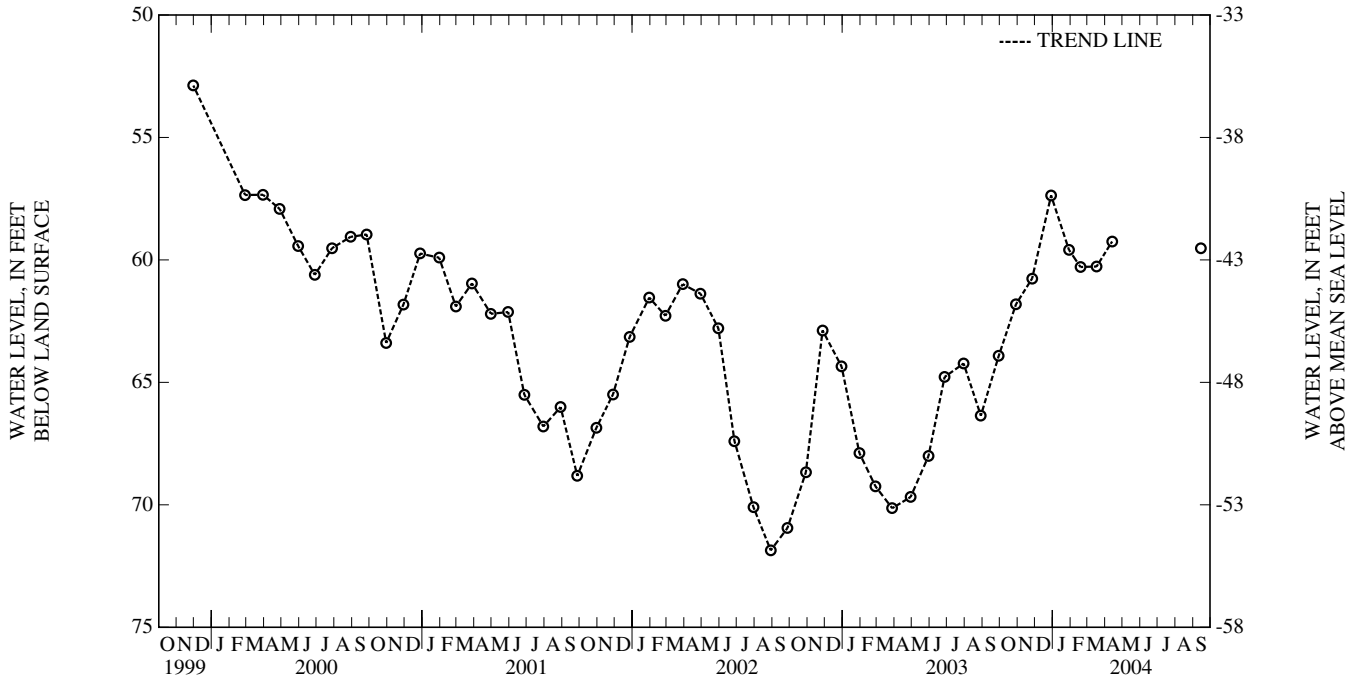
PERIOD OF RECORD.--August 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.15 ft below land surface, May 1, 1953; lowest measured, 71.86 ft below land surface, August 29, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	61.81	DEC 29, 2003	57.37	FEB 18, 2004	60.29	APR 13, 2004	59.25
NOV 26	60.76	JAN 29, 2004	59.59	MAR 17	60.27	SEP 14	59.52

HIGHEST 57.37 DEC 29, 2003
 LOWEST 61.81 OCT 29, 2003



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SOMERSET COUNTY--Continued

WELL NUMBER.--SO Ce 42. SITE ID.--380927075423701. PERMIT NUMBER.--SO-81-0394.

LOCATION.--Lat 38°09'30", long 75°41'56", Hydrologic Unit 02060009, at Eastern Shore Correctional Institution. Owner: Maryland Department of Correction.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.-Drilled, observation, artesian well, depth 215 ft; casing diameter 4 in., to 185 ft; screen diameter 4 in., from 185 to 215 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, from January 1986 to March 2004.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.10 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--July 1984 to March 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.32 ft below land surface, August 27, 1984; lowest measured, 51.90 ft below land surface, August 7, 1991 (recorder).

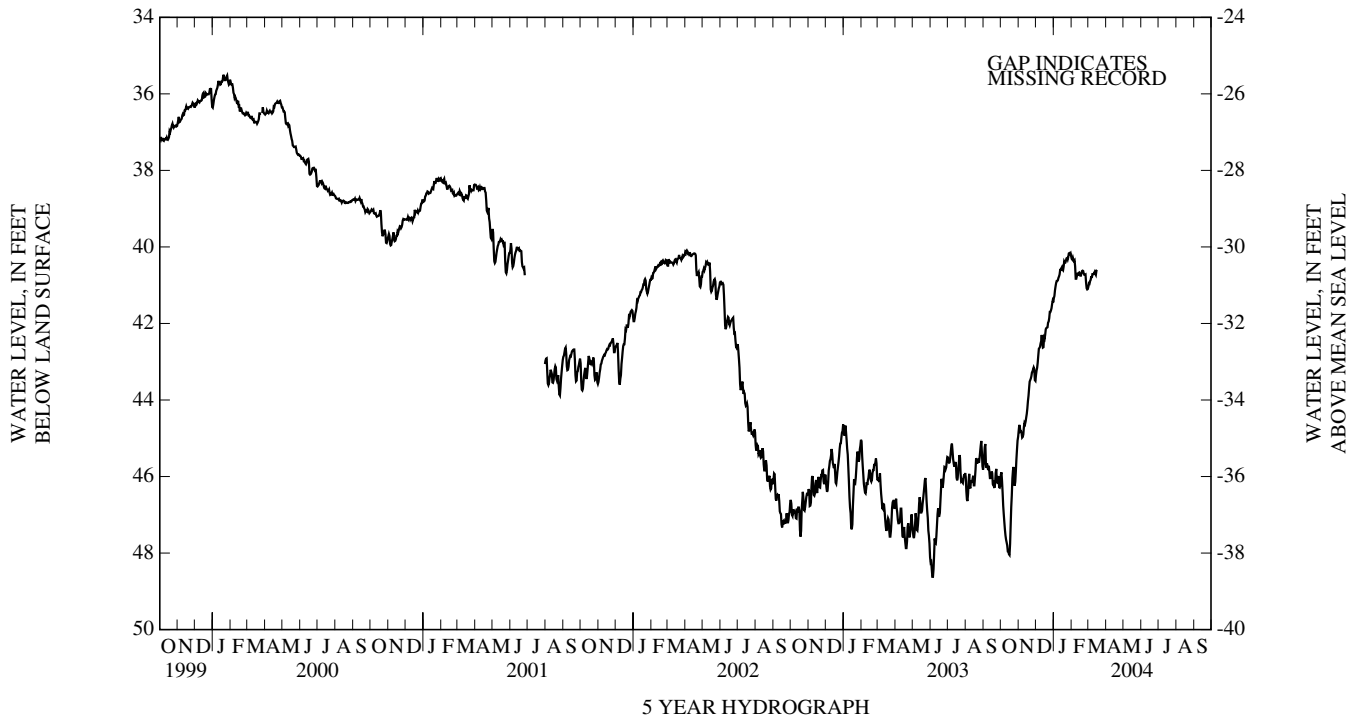
WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	45.07	DEC 29, 2003	41.40	FEB 18, 2004	40.66
NOV 26	43.19	JAN 29, 2004	40.12	MAR 17	40.43
HIGHEST 40.12 JAN 29, 2004					
LOWEST 45.07 OCT 29, 2003					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	45.95	45.61	44.79	44.59	43.35	43.22	41.34	41.27	40.31	40.24	41.04	40.93
2	45.89	45.67	44.65	44.50	43.23	43.13	41.28	41.12	40.33	40.27	40.95	40.85
3	46.12	45.89	44.72	44.51	43.16	43.01	41.13	40.98	40.28	40.04	40.96	40.89
4	46.41	46.12	44.83	44.69	43.02	42.84	41.03	40.90	40.34	40.18	40.89	40.78
5	46.76	46.41	44.82	44.65	42.84	42.63	40.94	40.77	40.37	40.30	40.86	40.69
6	46.98	46.72	44.86	44.63	42.66	42.50	40.89	40.75	40.35	40.18	40.77	40.56
7	47.19	46.94	44.98	44.82	42.64	42.57	40.89	40.81	40.51	40.13	40.81	40.69
8	47.38	47.12	44.96	44.86	42.61	42.46	40.87	40.76	40.83	40.51	40.71	40.60
9	47.54	47.34	44.90	44.68	42.52	42.33	40.81	40.69	40.83	40.70	40.71	40.55
10	47.65	47.48	44.70	44.44	42.46	42.21	40.77	40.65	40.76	40.66	40.71	40.53
11	47.72	47.56	44.60	44.43	42.30	41.94	40.72	40.55	40.71	40.62	40.68	40.46
12	47.80	47.58	44.63	44.51	42.52	42.23	40.60	40.47	40.72	40.63	40.65	40.33
13	47.95	47.71	44.56	44.36	42.63	42.52	40.60	40.49	40.68	40.58	40.70	40.57
14	47.95	47.76	44.46	44.35	42.62	42.11	40.56	40.44	40.67	40.59	40.73	40.60
15	48.03	47.60	44.36	44.21	42.37	42.18	40.53	40.35	40.71	40.64	40.62	40.54
16	48.05	47.76	44.22	44.00	42.40	42.28	40.59	40.50	40.75	40.67	40.60	40.45
17	47.76	47.28	44.03	43.85	42.29	42.09	40.61	40.52	40.75	40.64	---	---
18	47.28	46.80	43.89	43.63	42.15	42.02	40.52	40.28	40.68	40.57	---	---
19	46.80	46.45	43.70	43.28	42.12	42.03	40.38	40.26	40.63	40.42	---	---
20	46.49	46.05	43.52	43.28	42.11	41.98	40.41	40.34	40.62	40.42	---	---
21	46.05	45.79	43.48	43.28	42.10	41.95	40.41	40.32	40.63	40.38	---	---
22	45.84	45.64	43.44	43.28	41.98	41.86	40.36	40.18	40.70	40.53	---	---
23	45.75	45.57	43.38	43.18	41.95	41.82	40.30	40.20	40.73	40.62	---	---
24	46.15	45.71	43.28	43.00	41.86	41.50	40.29	40.17	40.73	40.55	---	---
25	46.24	46.07	43.25	43.06	41.70	41.54	40.33	40.24	40.72	40.65	---	---
26	46.14	45.79	43.20	43.00	41.70	41.57	40.27	40.12	40.93	40.70	---	---
27	45.86	45.41	43.15	42.98	41.66	41.56	40.17	39.95	41.08	40.93	---	---
28	45.55	45.24	43.19	43.03	41.60	41.42	40.16	40.01	41.11	41.04	---	---
29	45.29	44.90	43.48	43.19	41.49	41.35	40.18	40.11	41.10	41.02	---	---
30	45.06	44.88	43.50	43.35	41.41	41.27	40.16	40.11	---	---	---	---
31	44.96	44.74	---	---	41.45	41.30	40.24	40.16	---	---	---	---
MONTH	48.05	44.74	44.98	42.98	43.35	41.27	41.34	39.95	41.11	40.04	41.04	40.33

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	48.05	39.95										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

SOMERSET COUNTY--Continued

WELL NUMBER.--SO Cf 2. SITE ID.--380616075380701.

LOCATION.--Lat 38°06'16", long 75°38'07", Hydrologic Unit 02060009, on U.S. Rt. 13, 4.5 mi west of intersection of U.S. Rt. 13, and MD Rt. 364, near Costen. Owner: Maryland State Highway Administration.

AQUIFER.--Kent Island Formation (Columbia aquifer) of Pleistocene age. Aquifer code: 112KILD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 15 ft; casing diameter 1.25 in., to unknown depth.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by natural climatic response.

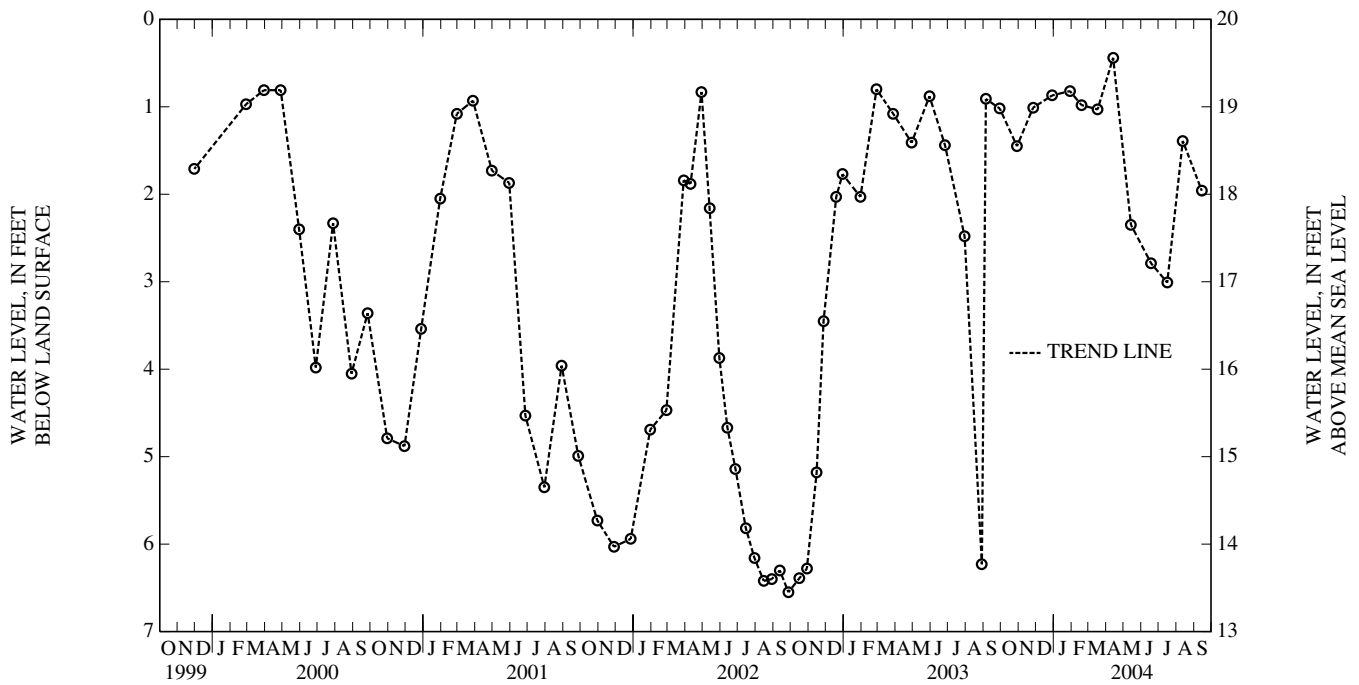
PERIOD OF RECORD.--August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.28 ft below land surface, May 9, 1958; lowest measured, 6.55 ft below land surface, September 27, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	1.45	JAN 29, 2004	.82	APR 13, 2004	.44	JUL 16, 2004	3.01
NOV 26	1.01	FEB 18	.98	MAY 14	2.35	AUG 12	1.39
DEC 29	.87	MAR 17	1.03	JUN 18	2.79	SEP 14	1.96

HIGHEST .44 APR 13, 2004
 LOWEST 3.01 JUL 16, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

TALBOT COUNTY

WELL NUMBER.--TA Bf 73. SITE ID.--385242075593101. PERMIT NUMBER.--TA-02-1641.

LOCATION.--Lat 38°52'42", long 75°59'31", Hydrologic Unit 02060005, in Cordova. Owner: Allen Foods.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 288 ft; casing diameter 4 in., to 276 ft; casing diameter 2 in., from 276 to 283 ft; screen diameter 3 in., from 283 to 288 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 42 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.50 ft above land surface.

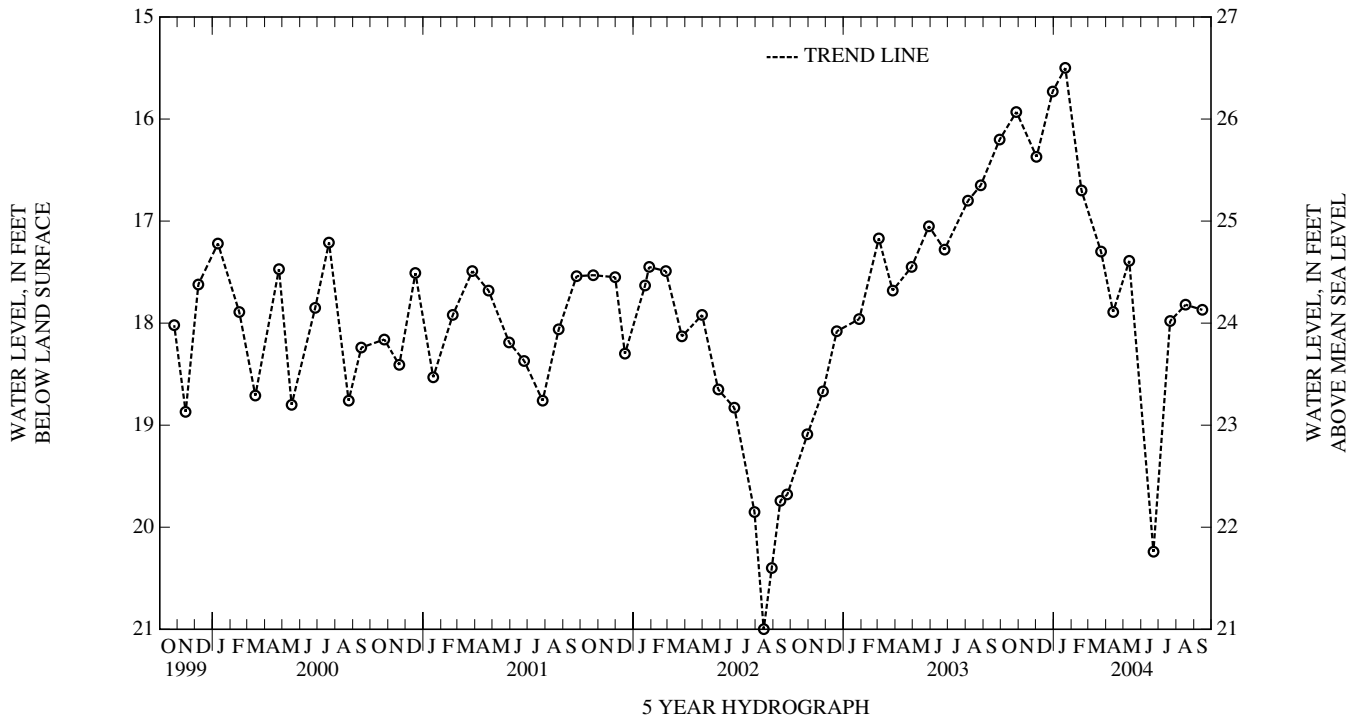
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. A water level was reported by the driller as 26 ft below land surface on December 16, 1955. A water level was measured at 26.64 ft below land surface on March 10, 1956. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--March 1956, December 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.29 ft below land surface, May 4, 1961; lowest measured, 76.57 ft below land surface, December 6, 1974.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	15.93	JAN 21, 2004	15.50	APR 13, 2004	17.89	JUL 21, 2004	17.98
DEC 02	16.37	FEB 18	16.70	MAY 11	17.39	AUG 17	17.82
30	15.73	MAR 23	17.30	JUN 22	20.24	SEP 15	17.87
HIGHEST 15.50 JAN 21, 2004							
LOWEST 20.24 JUN 22, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

TALBOT COUNTY--Continued

WELL NUMBER.--TA Bf 74. SITE ID.--385242075593102. PERMIT NUMBER.--TA-02-1805.

LOCATION.--Lat 38°52'42", long 75°59'31", Hydrologic Unit 02060005, in Cordova. Owner: Allen Foods.

AQUIFER.--Pensauken Formation (Columbia aquifer) of Upper Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 48.4 ft; casing diameter 4 in., to 42.5 ft; screen diameter 3 in., from 43.2 to 48.4 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 42 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.96 ft above land surface.

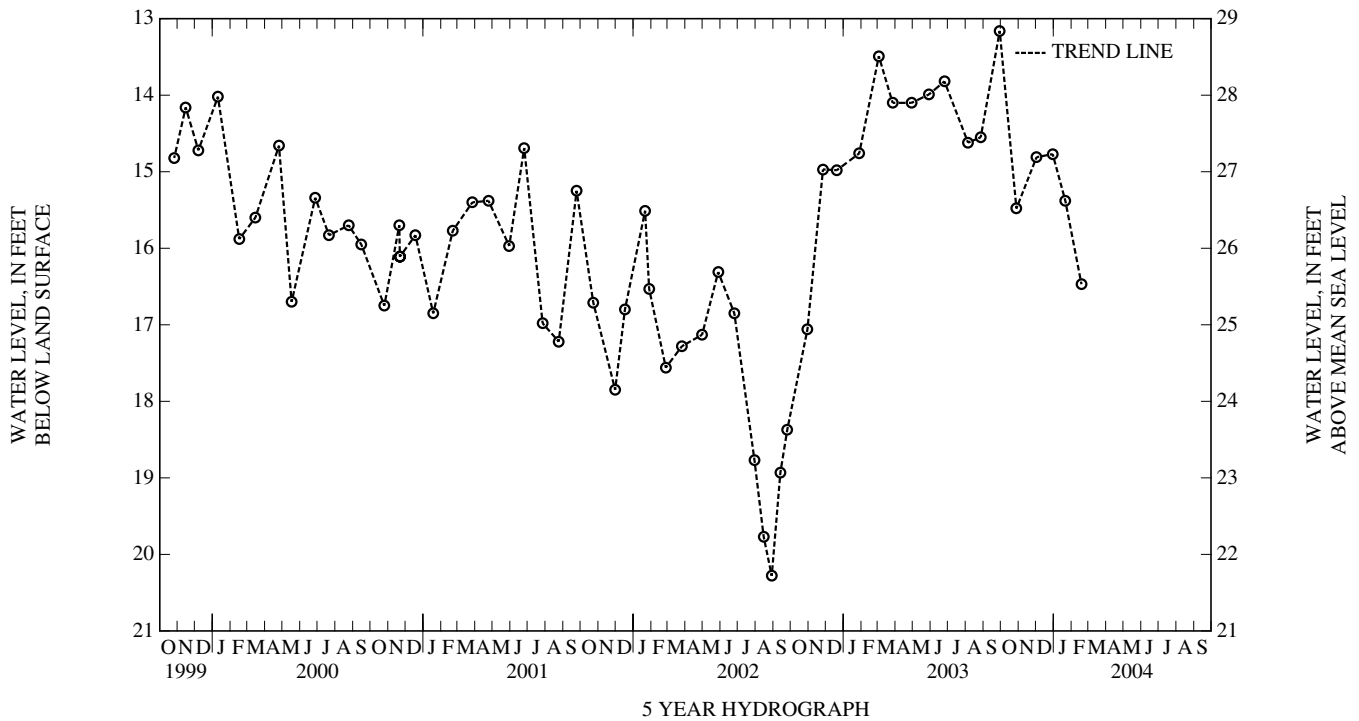
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--April 1956 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.48 ft below land surface, December 14, 1971; lowest measured, 21.36 ft below land surface, November 2, 1993.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	15.48	DEC 30, 2003	14.77	FEB 18, 2004	16.47
DEC 02	14.81	JAN 21, 2004	15.38		
HIGHEST 14.77 DEC 30, 2003					
LOWEST 16.47 FEB 18, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

TALBOT COUNTY--Continued

WELL NUMBER.--TA Cc 35. SITE ID.--384923076100601. PERMIT NUMBER.--TA-73-0767.

LOCATION.--Lat 38°49'23", long 76°10'06", Hydrologic Unit 02060002, in Tunis Mills. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 180 ft; casing diameter 6 to 2 in.; screened from 170 to 180 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.28 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

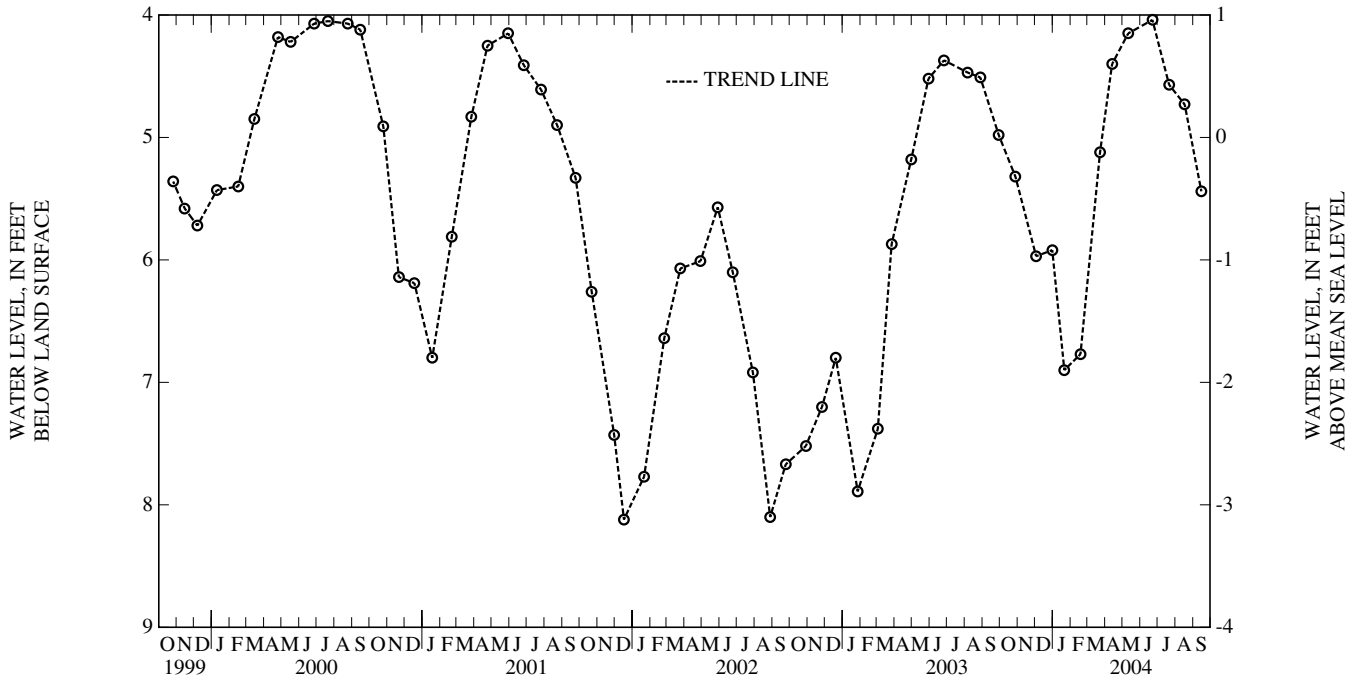
PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land surface, April 2, 1980; lowest measured, 8.12 ft below land surface, December 17, 2001.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	5.32	JAN 21, 2004	6.90	APR 13, 2004	4.40	JUL 21, 2004	4.57
DEC 03	5.97	FEB 18	6.77	MAY 11	4.15	AUG 17	4.73
31	5.92	MAR 23	5.12	JUN 22	4.04	SEP 15	5.44

HIGHEST 4.04 JUN 22, 2004
 LOWEST 6.90 JAN 21, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

TALBOT COUNTY—Continued

WELL NUMBER.--TA Cc 36. SITE ID.--384514076103701. PERMIT NUMBER.--TA-73-0751.

LOCATION.--Lat 38°45'14", long 76°10'37", Hydrologic Unit 02060002, in Newcomb. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 241 ft; casing diameter 6 in., to 51 ft; casing diameter 2 in., from 51 to 231 ft; screen diameter 2 in., from 231 to 241 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 4.40 ft above land surface.

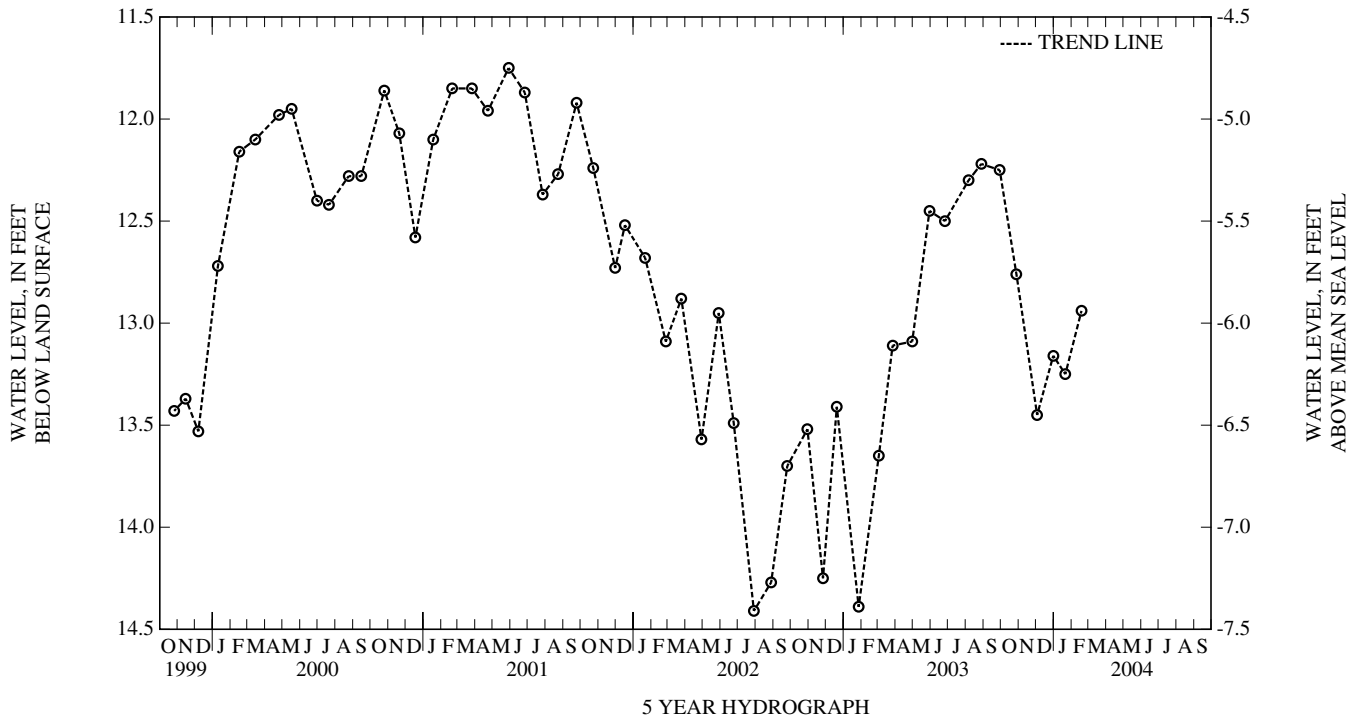
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1976 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.89 ft below land surface, April 2, 1980; lowest measured, 14.41 ft below land surface, July 29, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	12.76	DEC 31, 2003	13.16	FEB 18, 2004	12.94
DEC 03	13.45	JAN 21, 2004	13.25		
HIGHEST 12.76 OCT 28, 2003					
LOWEST 13.45 DEC 03, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

TALBOT COUNTY--Continued

WELL NUMBER.--TA Cc 50. SITE ID.--384707076133202. PERMIT NUMBER.--TA-81-2002.

LOCATION.--Lat 38°47'08", long 76°13'37", Hydrologic Unit 02060005.

AQUIFER.--Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 485 ft; casing diameter 2 in., to 400 ft; screened from 400 to 485 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 8 ft above National Geodetic Vertical Datum of 1929. Measuring Point: Top of casing, 1.45 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well. Water level measurements of 63.74 ft below land surface on December 31, 2003 and 65.23 ft below land surface on July 21, 2004 were caused by nearby pumpage.

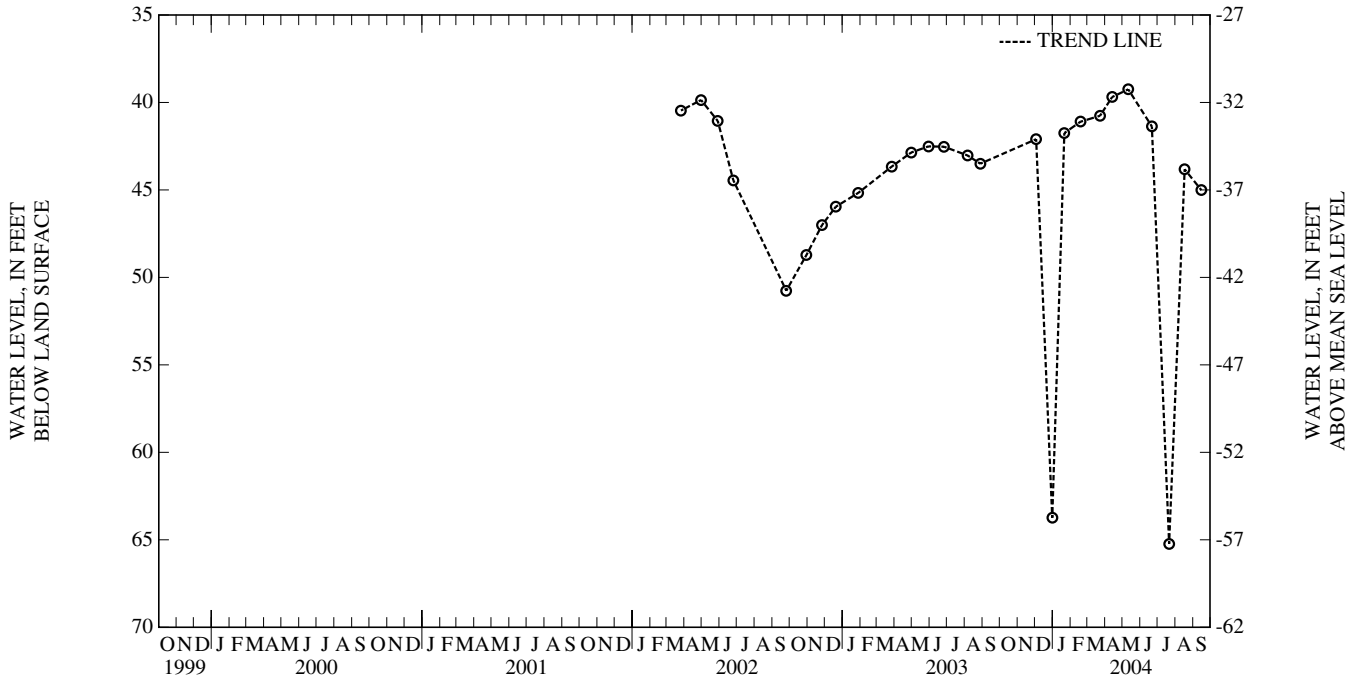
PERIOD OF RECORD.-- February 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.53 ft below land surface, May 4, 1998; lowest measured, 65.23 ft below land surface, July 21, 2004.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 03, 2003	42.10	FEB 18, 2004	41.10	MAY 11, 2004	39.25	AUG 17, 2004	43.82
31	63.74	MAR 23	40.76	JUN 21	41.37	SEP 15	45.01
JAN 21, 2004	41.75	APR 13	39.69	JUL 21	65.23		

HIGHEST 39.25 MAY 11, 2004
 LOWEST 65.23 JUL 21, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

TALBOT COUNTY—Continued

WELL NUMBER.--TA Cd 57. SITE ID.--384709076050301. PERMIT NUMBER.--TA-88-1328.

LOCATION.--Lat 38°47'09", long 076°05'03", Hydrologic Unit 02060005, in Easton, 0.3 mi southwest of the intersection with Glebe Rd and Commerce Drive. Owner: Easton Utilities Commission.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 1,198 ft; casing diameter 4 in., to 295 ft; casing diameter 2 in., from 260 to 1,137 ft, and 1,158 to 1,198 ft; screen diameter 2 in., from 1,137 to 1,158 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 12 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.78 ft above land surface.

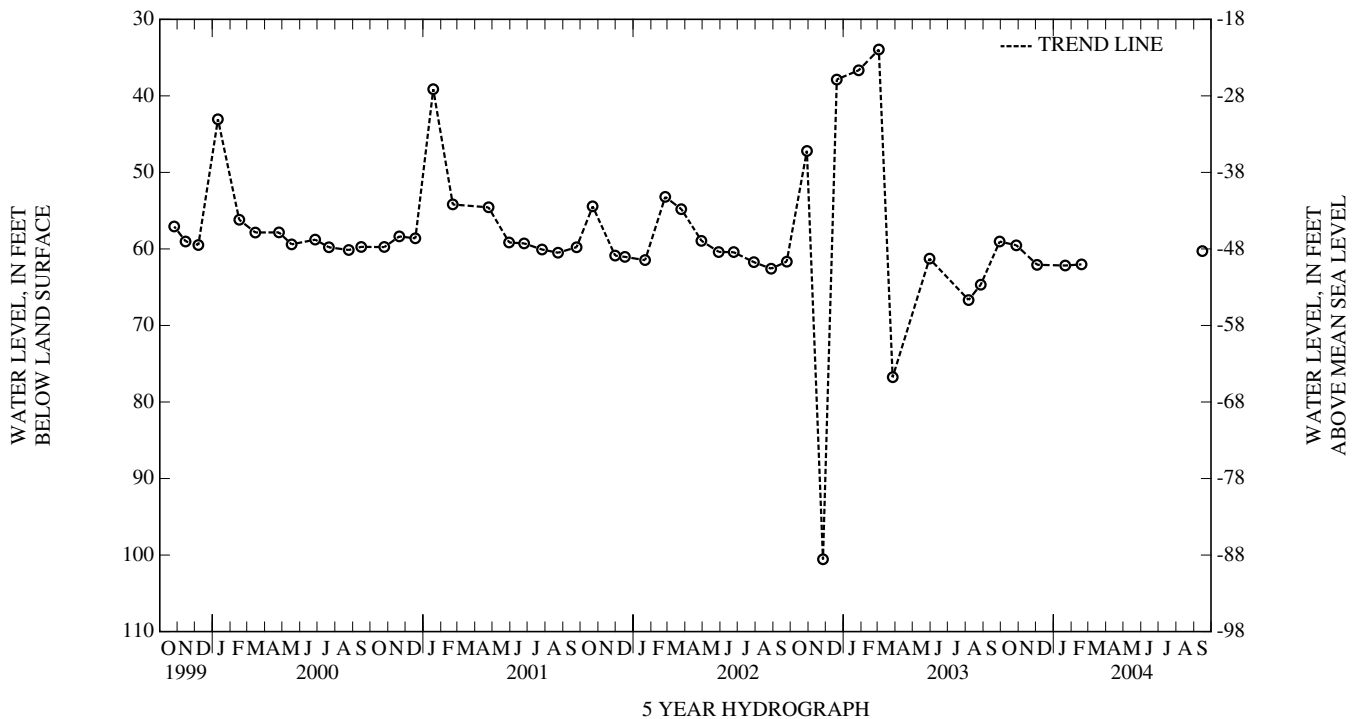
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.42 ft below land surface, March 4, 1996; lowest measured, 100.57 ft below land surface, November 26, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	59.52	JAN 21, 2004	62.17	SEP 15, 2004	60.27
DEC 03	62.07	FEB 18	62.02		
HIGHEST	59.52	OCT 28, 2003			
LOWEST	62.17	JAN 21, 2004			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

TALBOT COUNTY—Continued

WELL NUMBER.--TA Ce 7. SITE ID.--384643076043801.

LOCATION.--Lat 38°46'43", long 76°04'38", Hydrologic Unit 02060005, off Washington St., in Easton. Owner: Easton Utilities Commission.

AQUIFER.--Cheswold aquifer in the Calvert Formation of Lower Miocene age. Aquifer code: 122CSLD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, measured depth 104 ft; casing diameter 4 in., to 95 ft; screen diameter 4 in., from 95 to 102 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.40 ft above land surface.

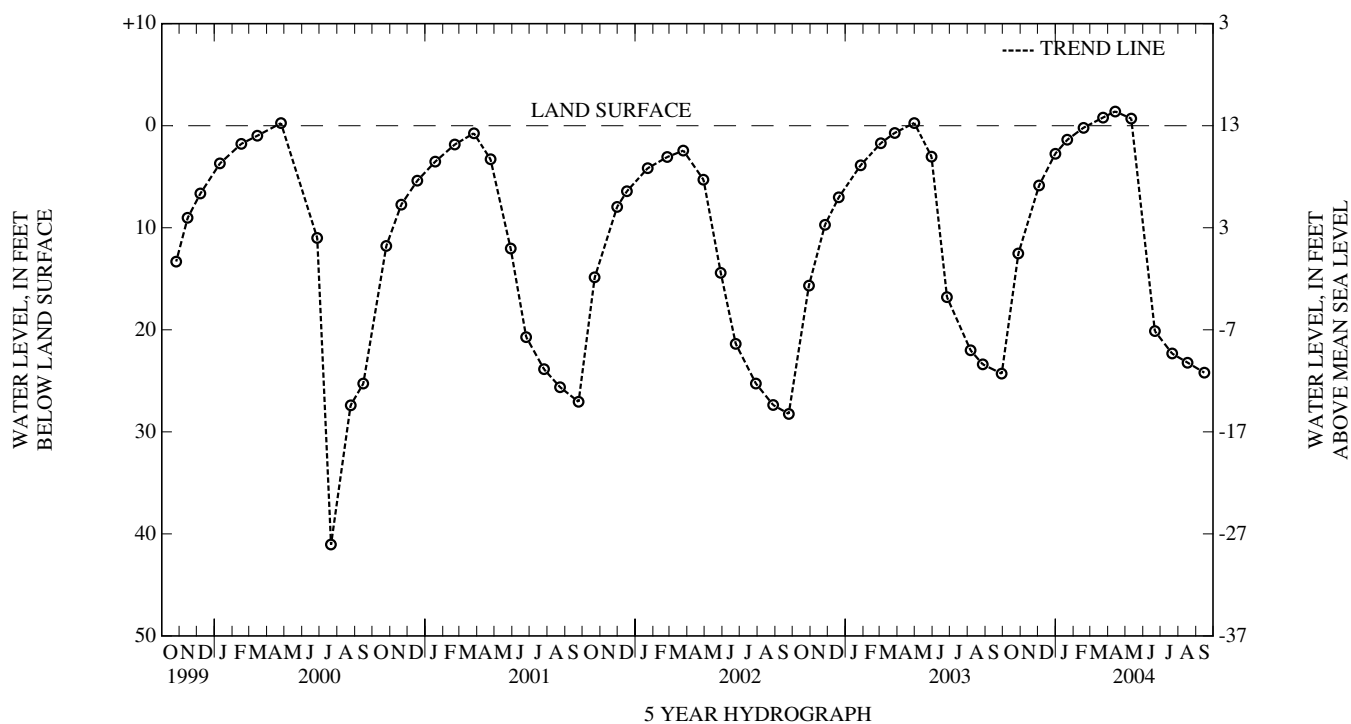
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. A water level was reported as 43.43 ft below land surface on October 7, 1948. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORDS.--April 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +1.40 ft above land surface, April 13, 2004; lowest measured 75.36 ft below land surface, August 2, 1966.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	12.52	JAN 21, 2004	1.38	APR 13, 2004	+1.40	JUL 21, 2004	22.33
DEC 03	5.85	FEB 18	.20	MAY 11	+.70	AUG 17	23.22
31	2.74	MAR 23	+8.80	JUN 21	20.13	SEP 15	24.20
HIGHEST +1.40		APR 13, 2004					
LOWEST 24.20		SEP 15, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WASHINGTON COUNTY

WELL NUMBER.--WA Ac 1. SITE ID.--394154078103501.

LOCATION.--Lat 39°41'54", long 78°10'35", Hydrologic Unit 02070004, in Hancock. Owner: Private Residence.

AQUIFER.--Mahantango Formation of Middle-Lower Devonian age. Aquifer code: 344MNNG.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 83 ft; casing diameter 4 in., to unknown depth; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface is 440 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Removable plug in base of hand pump, 0.60 ft above land surface.

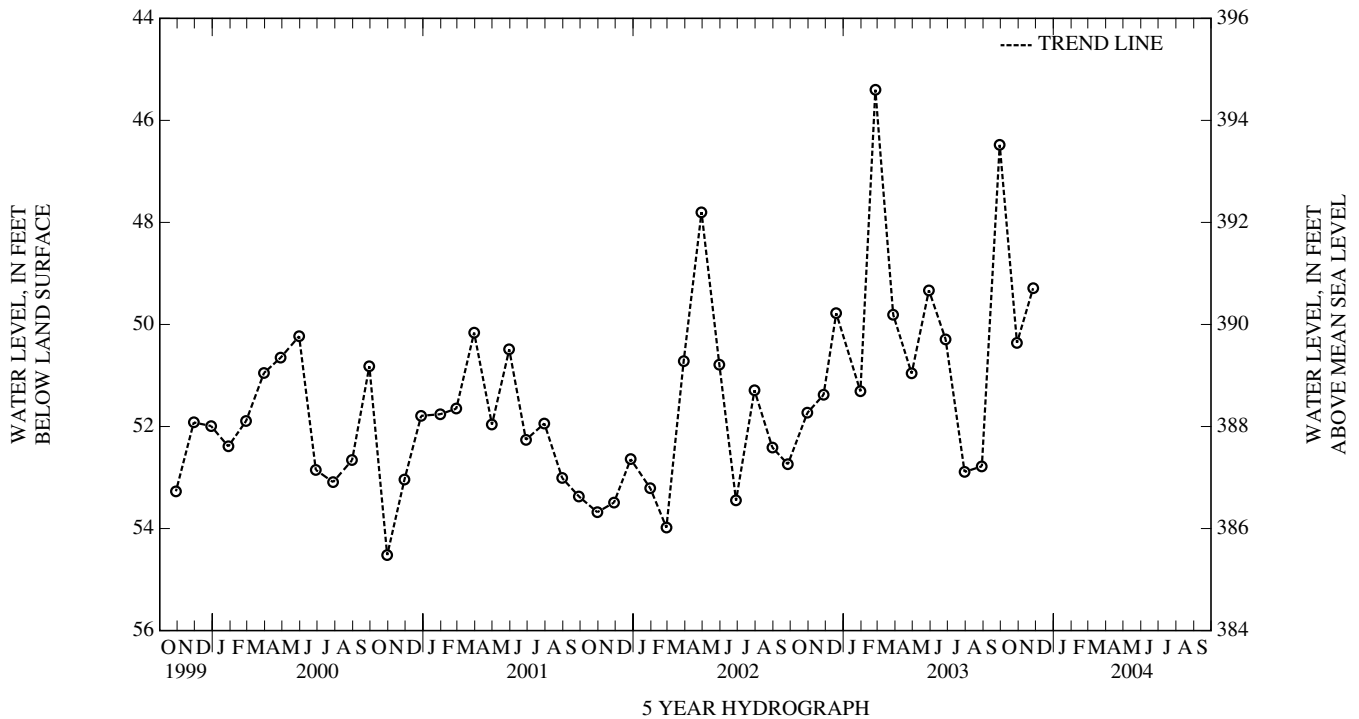
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--October 1946 to November 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.65 ft below land surface, January 2, 1976; lowest measured, 58.18 ft below land surface, November 23, 1992.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	50.36	NOV 26, 2003	49.29
HIGHEST	49.29	NOV 26, 2003	
LOWEST	50.36	OCT 29, 2003	



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WASHINGTON COUNTY--Continued

WELL NUMBER.--WA Be 2. SITE ID.--393638078001301.

LOCATION.--Lat 39°36'38", long 78°00'13", Hydrologic Unit 02070004, about 1.2 mi southeast of Big Pool, at Fort Frederick State Park. Owner: State of Maryland.

AQUIFER.--Marcelles-Needmore Shale of Middle Devonian age. Aquifer code: 344MRCL and 344NDRM.

WELL CHARACTERISTICS.--Dug, stone-lined, unused, water-table well, depth 41 ft; casing diameter 42 in.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of inside edge of wooden access hatch, 0.90 ft above land surface.

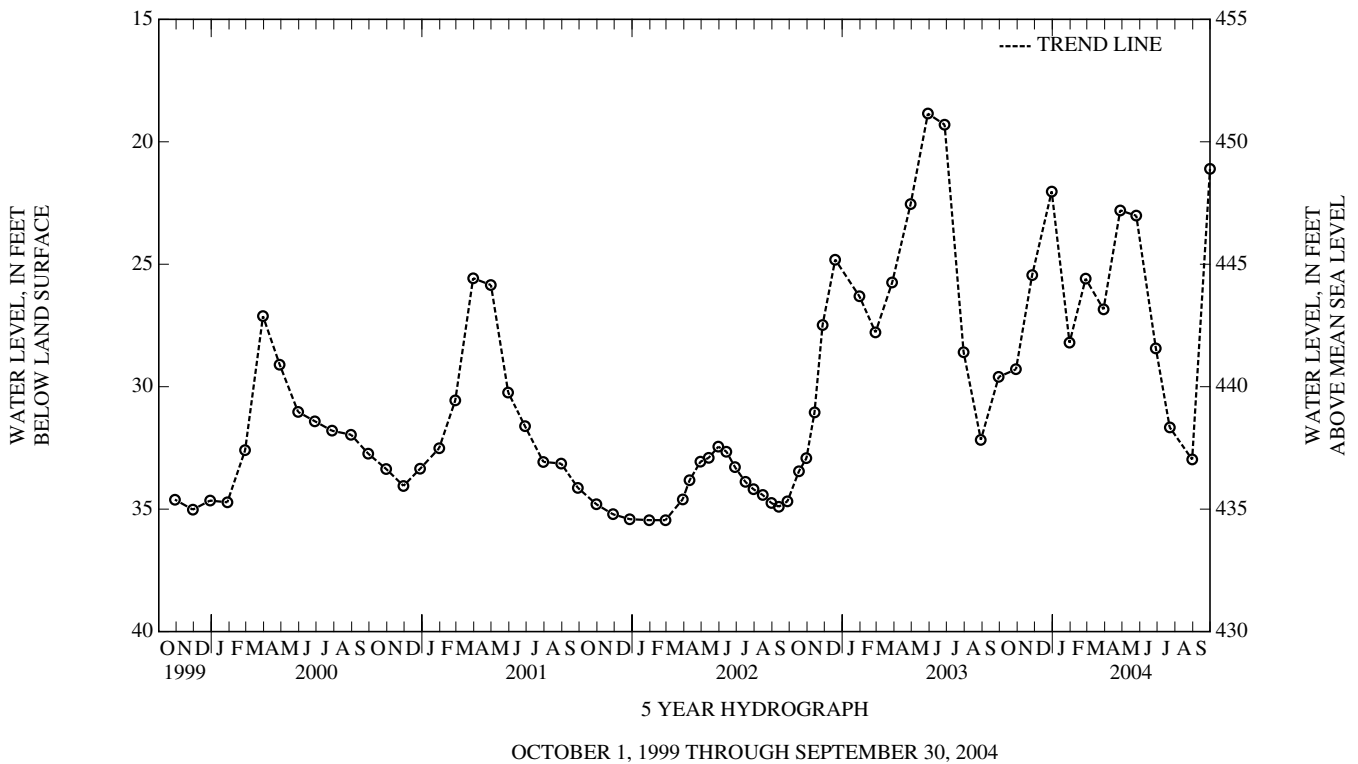
REMARKS.--Collection of Basic Records (CBR) observation well.

PERIOD OF RECORD.--December 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.72 ft below land surface, April 28, 1993; lowest measured, 36.92 ft below land surface, January 11, 1965.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	29.29	JAN 30, 2004	28.20	APR 27, 2004	22.80	JUL 22, 2004	31.66
NOV 26	25.45	FEB 27	25.59	MAY 25	23.02	AUG 30	32.97
DEC 30	22.03	MAR 29	26.84	JUN 28	28.44	SEP 30	21.11
HIGHEST 21.11 SEP 30, 2004							
LOWEST 32.97 AUG 30, 2004							



WASHINGTON COUNTY--Continued

WELL NUMBER.--WA Bk 25. SITE ID.--393851077343001. PERMIT NUMBER.--WA-70-0235.

LOCATION.--Lat 39°38'51", long 77°34'30", Hydrologic Unit 02070004, 0.5 mi south of Smithsburg, at William M. Breichner Water Treatment Plant. Owner: U.S. Geological Survey.

AQUIFER.--Tomstown Formation of Lower Cambrian age. Aquifer code: 377TMSN.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 200 ft; casing diameter 6 in., to 128 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from April 27, 1970 to current year.

DATUM.--Elevation of land surface is 790 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 3.50 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

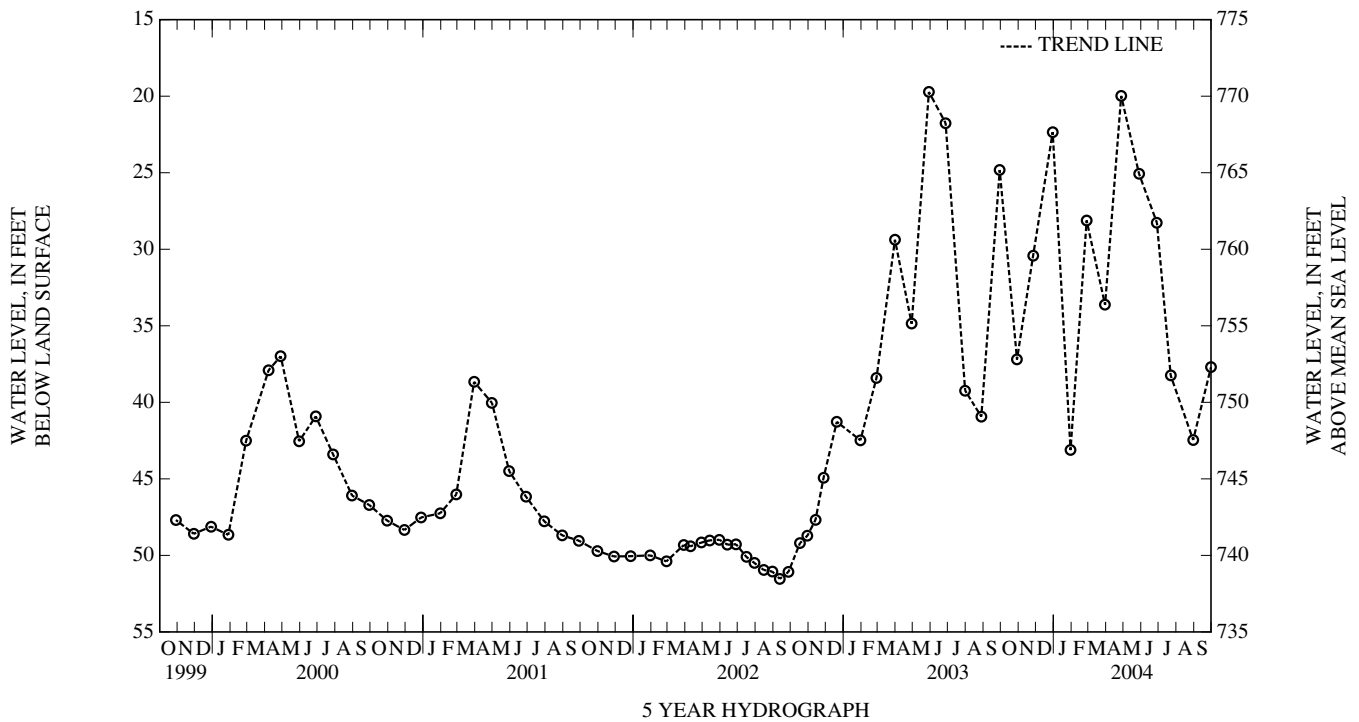
PERIOD OF RECORD.--April 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.74 ft below land surface, April 6, 1993; lowest measured, 51.53 ft below land surface September 12, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	37.20	JAN 30, 2004	43.12	APR 27, 2004	19.98	JUL 22, 2004	38.25
NOV 26	30.42	FEB 27	28.12	MAY 28	25.07	AUG 30	42.46
DEC 30	22.35	MAR 30	33.63	JUN 28	28.26	SEP 30	37.70

HIGHEST 19.98 APR 27, 2004
 LOWEST 43.12 JAN 30, 2004



5 YEAR HYDROGRAPH
 OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WASHINGTON COUNTY--Continued

WELL NUMBER.--WA Ch 106. SITE ID.--393414077461801. PERMIT NUMBER.--WA-73-2095.

LOCATION.--Lat 39°34'14", long 77°46'18", Hydrologic Unit 02070004, at Fountain Rock School. Owner: U.S. Geological Survey.

AQUIFER.--Conococheague Limestone (middle member) of Upper Cambrian age. Aquifer code: 371CCCG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 69 ft; casing diameter 6 in., to 41 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from March 1978 to June 1981, November 1985 to May 1987, and July 1987 to June 1994.

DATUM.--Elevation of land surface is 520 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.45 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

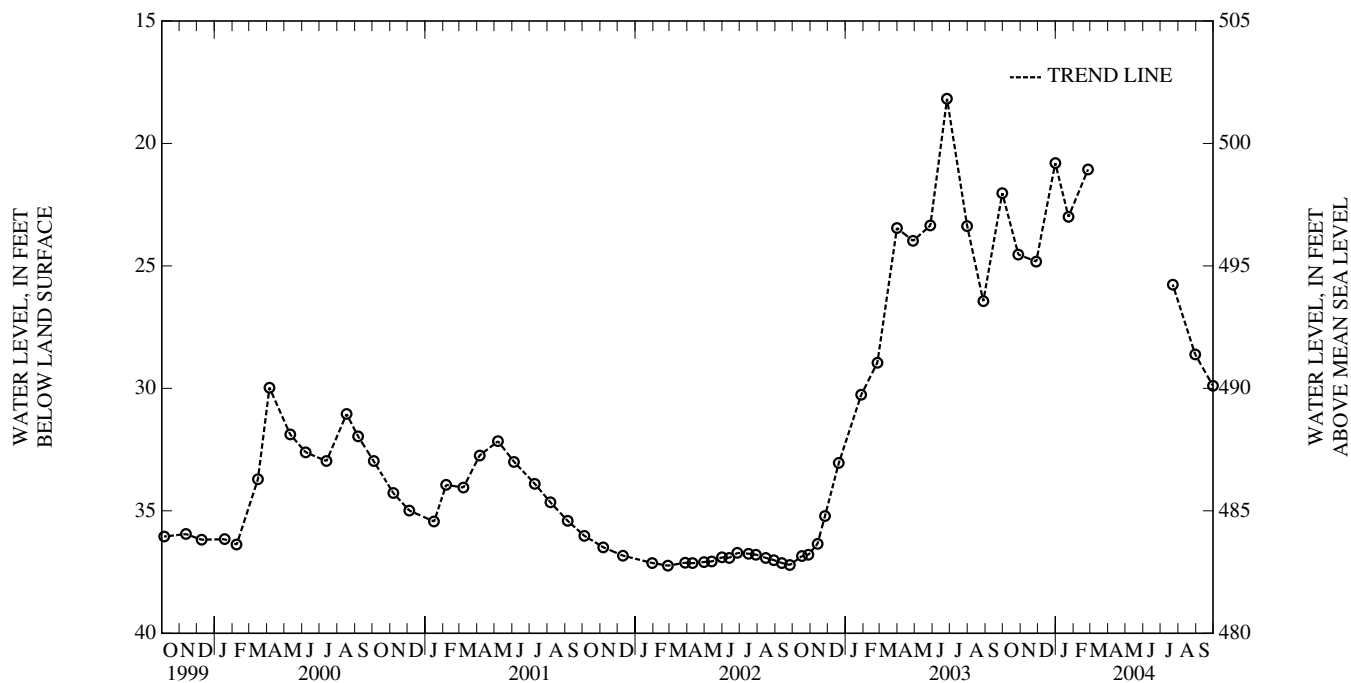
PERIOD OF RECORD.--February 1978 to June 1981, April 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.12 ft below land surface, May 4, 1993; lowest measured, 37.24 ft below land surface, February 26, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	24.54	DEC 31, 2003	20.80	FEB 26, 2004	21.06	AUG 30, 2004	28.61
NOV 28	24.82	JAN 23, 2004	22.99	JUL 22	25.76	SEP 30	29.90

HIGHEST 20.80 DEC 31, 2003
LOWEST 29.90 SEP 30, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WASHINGTON COUNTY—Continued

WELL NUMBER.--WA Ci 82. SITE ID.--393402077434201. PERMIT NUMBER.--WA-73-2101.

LOCATION.--Lat 39°34'02", long 77°43'42", Hydrologic Unit 02070004, at Maryland Correction Institution, near Lappans. Owner: U.S. Geological Survey.

AQUIFER.--Conococheague Limestone (middle member) of Upper Cambrian age. Aquifer code: 371CCCG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 84 ft; casing diameter 6 in., to 32 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from April 1978 to June 1981.

DATUM.--Elevation of land surface is 500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.30 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--February 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.95 ft below land surface, April 6, 1993; lowest measured, 59.28 ft below land surface, February 1, 1981.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	41.04	JAN 23, 2004	40.57	APR 27, 2004	35.39	AUG 30, 2004	48.08
DEC 31	35.77	FEB 26	36.84	JUL 22	43.22	SEP 30	39.15

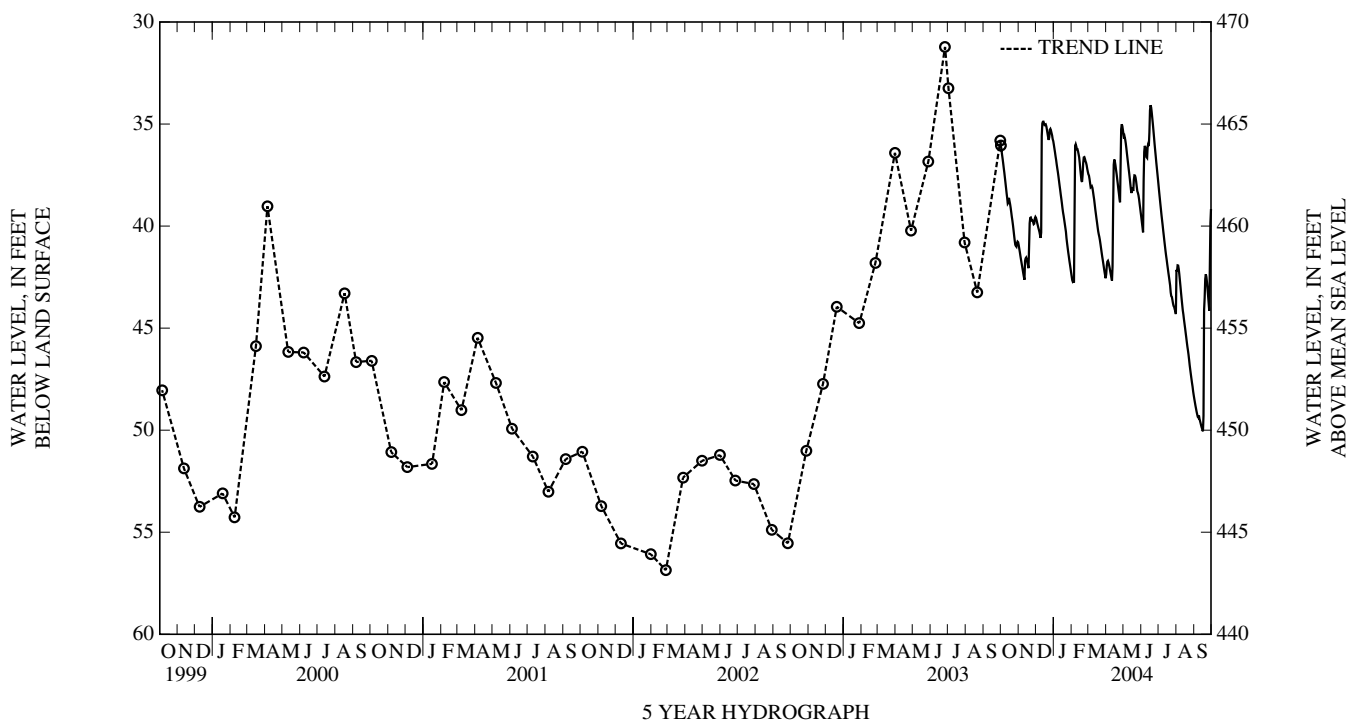
HIGHEST 35.39 APR 27, 2004
 LOWEST 48.08 AUG 30, 2004

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	36.14	35.96	41.02	40.86	39.65	39.55	36.10	35.91	42.56	42.37	37.51	37.40
2	36.39	36.14	41.20	41.02	39.77	39.65	36.29	36.10	42.74	42.56	37.60	37.47
3	36.60	36.39	41.38	41.20	39.89	39.77	36.48	36.29	42.78	42.69	37.79	37.60
4	36.80	36.60	41.56	41.38	40.01	39.89	36.67	36.48	42.72	42.69	38.01	37.79
5	37.04	36.80	41.74	41.56	40.13	40.01	36.88	36.67	42.82	42.72	38.17	38.01
6	37.27	37.04	41.89	41.74	40.23	40.13	37.08	36.88	42.82	36.03	38.12	38.05
7	37.50	37.27	42.07	41.89	40.36	40.23	37.27	37.08	36.13	36.01	38.06	38.03
8	37.75	37.50	42.25	42.07	40.50	40.36	37.45	37.27	36.01	35.98	38.20	38.06
9	38.01	37.75	42.41	42.25	40.64	40.50	37.68	37.45	36.19	36.01	38.40	38.20
10	38.28	38.01	42.57	42.41	40.68	37.59	37.91	37.68	36.26	36.19	38.61	38.40
11	38.51	38.28	42.71	42.41	37.59	35.12	38.11	37.91	36.25	36.19	38.80	38.61
12	38.77	38.51	42.41	41.51	35.12	34.89	38.34	38.11	36.41	36.25	39.07	38.80
13	39.02	38.77	41.63	41.56	34.89	34.88	38.57	38.34	36.51	36.41	39.29	39.07
14	39.13	38.16	41.58	41.53	34.91	34.88	38.76	38.57	36.76	36.50	39.50	39.29
15	38.72	38.32	41.70	41.58	35.02	34.91	39.01	38.76	37.07	36.76	39.73	39.50
16	38.84	38.72	41.81	41.70	35.08	35.02	39.24	39.01	37.38	37.07	39.93	39.73
17	39.01	38.84	41.99	41.81	35.09	35.01	39.42	39.24	37.65	37.38	40.15	39.93
18	39.20	39.01	42.13	41.99	35.06	35.01	39.60	39.42	37.89	37.65	40.32	40.15
19	39.44	39.20	42.16	39.75	35.18	35.06	39.78	39.60	38.00	37.69	40.47	40.32
20	39.63	39.44	40.00	39.68	35.38	35.18	39.99	39.78	37.75	37.14	40.59	40.47
21	39.84	39.63	39.68	39.57	35.54	35.38	40.18	39.99	37.14	36.69	40.78	40.59
22	40.07	39.84	39.61	39.57	35.71	35.54	40.39	40.18	36.69	36.60	40.98	40.78
23	40.33	40.07	39.71	39.61	35.84	35.71	40.72	40.39	36.64	36.61	41.19	40.98
24	40.58	40.33	39.77	39.69	35.85	35.39	40.96	40.72	36.76	36.64	41.39	41.19
25	40.80	40.58	39.75	39.72	35.39	35.23	41.18	40.96	36.89	36.76	41.58	41.39
26	41.02	40.80	39.85	39.75	35.26	35.23	41.39	41.18	36.94	36.84	41.75	41.58
27	41.03	40.91	39.95	39.85	35.37	35.26	41.59	41.39	37.11	36.94	41.95	41.75
28	41.05	40.93	39.98	39.75	35.50	35.37	41.78	41.59	37.27	37.11	42.14	41.95
29	40.93	40.79	39.75	39.56	35.62	35.50	41.98	41.78	37.40	37.27	42.32	42.14
30	40.79	40.75	39.56	39.55	35.85	35.62	42.18	41.98	---	---	42.48	42.32
31	40.86	40.75	---	---	35.91	35.77	42.37	42.18	---	---	42.63	42.48
MONTH	41.05	35.96	42.71	39.55	40.68	34.88	42.37	35.91	42.82	35.98	42.63	37.40

WASHINGTON COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	42.63	42.12	35.65	35.41	39.70	39.47	38.20	37.89	43.83	41.45	48.55	48.39
2	42.12	41.81	35.79	35.65	39.94	39.70	38.48	38.20	42.35	42.02	48.72	48.55
3	41.81	41.69	35.68	35.61	40.19	39.94	38.76	38.48	42.02	41.89	48.88	48.72
4	41.73	41.69	35.85	35.68	40.42	40.19	39.03	38.76	42.00	41.89	49.02	48.88
5	41.85	41.73	36.08	35.85	40.42	36.75	39.32	39.03	42.24	42.00	49.16	49.02
6	41.98	41.85	36.32	36.08	36.75	36.12	39.58	39.32	42.52	42.24	49.29	49.16
7	42.14	41.98	36.58	36.32	36.12	36.05	39.83	39.58	42.82	42.52	49.41	49.29
8	42.30	42.14	36.82	36.58	36.25	36.08	40.09	39.83	43.12	42.82	49.43	49.27
9	42.46	42.30	37.07	36.82	36.50	36.25	40.35	40.09	43.43	43.12	49.37	49.23
10	42.60	42.46	37.31	37.07	36.73	36.50	40.60	40.35	43.72	43.43	49.51	49.37
11	42.74	42.60	37.57	37.31	36.84	36.30	40.85	40.60	44.00	43.72	49.61	49.51
12	42.79	40.27	37.82	37.57	36.30	35.98	41.10	40.85	44.21	44.00	49.72	49.61
13	40.27	37.55	38.10	37.82	36.03	35.97	41.34	41.10	44.45	44.19	49.84	49.72
14	37.55	36.75	38.34	38.10	36.11	36.03	41.54	41.34	44.67	44.45	49.93	49.84
15	36.77	36.72	38.48	38.21	36.06	34.60	41.76	41.54	44.90	44.67	50.00	49.88
16	36.91	36.77	38.21	38.10	34.60	34.13	41.97	41.76	45.12	44.90	50.11	50.00
17	37.12	36.91	38.27	38.13	34.13	34.06	42.18	41.97	45.35	45.12	50.13	45.66
18	37.34	37.12	38.38	38.02	34.28	34.09	42.39	42.18	45.57	45.35	45.66	43.55
19	37.56	37.34	38.02	37.56	34.56	34.28	42.60	42.39	45.80	45.57	44.14	42.94
20	37.80	37.56	37.56	37.50	34.85	34.56	42.81	42.60	46.00	45.80	42.94	42.38
21	38.04	37.80	37.56	37.50	35.15	34.85	43.01	42.81	46.19	46.00	42.39	42.34
22	38.28	38.04	37.71	37.56	35.48	35.15	43.38	43.01	46.43	46.19	42.61	42.39
23	38.52	38.28	37.93	37.71	35.81	35.48	43.48	43.38	46.70	46.43	42.91	42.61
24	38.76	38.52	38.19	37.93	36.13	35.81	43.55	43.40	46.94	46.70	43.25	42.91
25	38.87	38.76	38.36	38.19	36.43	36.13	43.71	43.55	47.15	46.94	43.61	43.25
26	38.78	35.68	38.42	38.35	36.74	36.43	43.87	43.71	47.37	47.15	43.98	43.61
27	35.68	35.03	38.57	38.42	37.03	36.74	43.96	43.87	47.59	47.37	44.31	43.98
28	35.03	35.00	38.79	38.57	37.31	37.03	44.02	43.90	47.78	47.59	44.35	39.77
29	35.19	35.03	39.02	38.79	37.59	37.31	44.13	44.02	47.95	47.78	40.04	39.48
30	35.41	35.19	39.25	39.02	37.89	37.59	44.27	44.06	48.20	47.95	39.48	39.03
31	---	---	39.47	39.25	---	---	44.39	43.83	48.39	48.20	---	---
MONTH	42.79	35.00	39.47	35.41	40.42	34.06	44.39	37.89	48.39	41.45	50.13	39.03
YEAR	50.13	34.06										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WASHINGTON COUNTY—Continued

WELL NUMBER.--WA Dj 2. SITE ID.--392904077371501.

LOCATION.--Lat 39°29'04", long 77°37'15", Hydrologic Unit 02070004, at Turner's Gap on Alt. U.S. 40. Owner: Russell Schwartz.

AQUIFER.--Weverton Formation (Buzzard Knob member) of Lower Cambrian age. Aquifer code: 377WVRN.

WELL CHARACTERISTICS.--Dug, stone-lined, observation, water-table well, depth 61.3 ft; casing diameter 48 in.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 1,070 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of concrete cover, 0.25 ft above land surface.

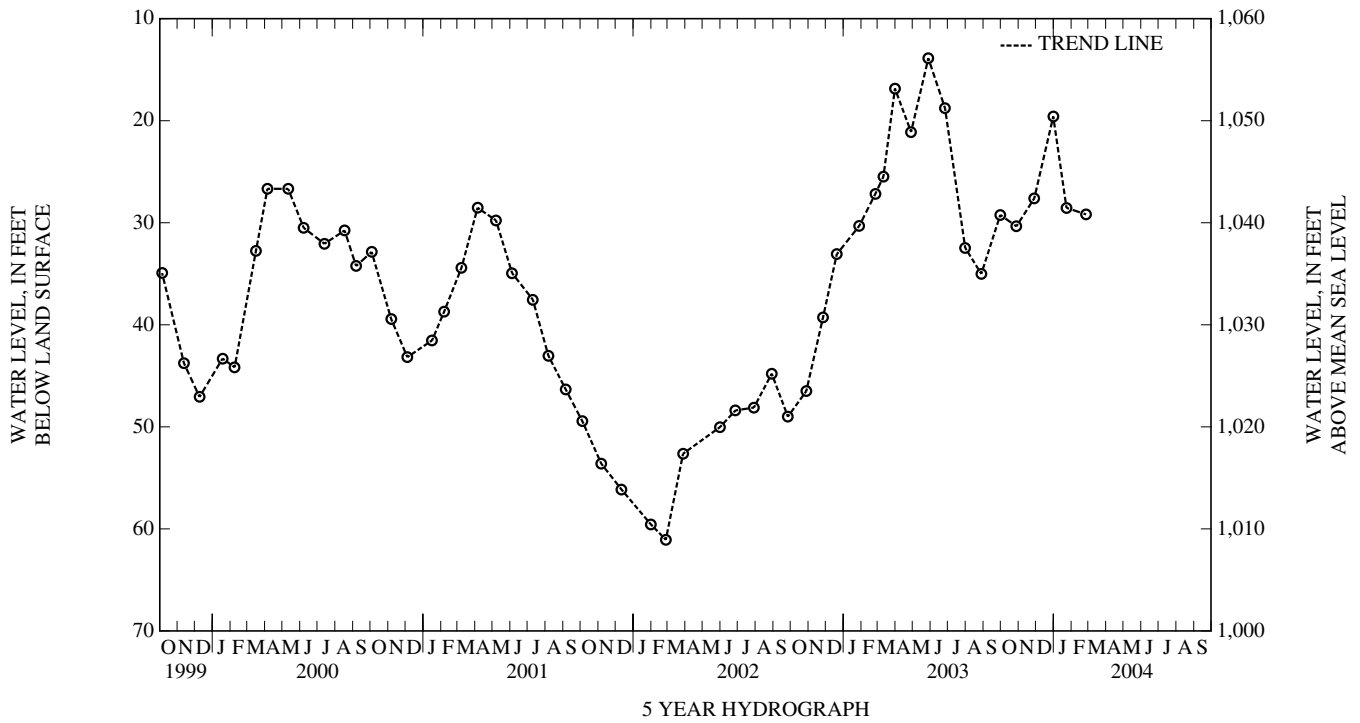
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--December 1956 to February 2004 (discontinued).

EXTREMES FOR PERIOD FOR RECORD.--Highest water level measured, 11.92 ft below land surface, May 14, 1998; lowest measured, 61.06 ft below land surface, February 26, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2003	30.35	DEC 31, 2003	19.59	FEB 26, 2004	29.18
NOV 28	27.61	JAN 23, 2004	28.54		
HIGHEST 19.59 DEC 31, 2003					
LOWEST 30.35 OCT 28, 2003					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WICOMICO COUNTY

WELL NUMBER.--WI Ce 13. SITE ID.--382150075352101.

LOCATION.--Lat 38°21'50", long 75°35'21", Hydrologic Unit 02060007, at Municipal Zoo Park, Salisbury. Owner: City of Salisbury.

AQUIFER.--Pensauken Formation (Salisbury aquifer) of Upper Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, reported depth 65 ft, measured depth 51.7 ft; casing diameter 16 to 10 in., to unknown depth; screen diameter and interval unknown; screen length 20 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder from July 1947 to January 1955, and August 1962 to August 1968.

DATUM.--Elevation of land surface is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.22 ft above land surface.

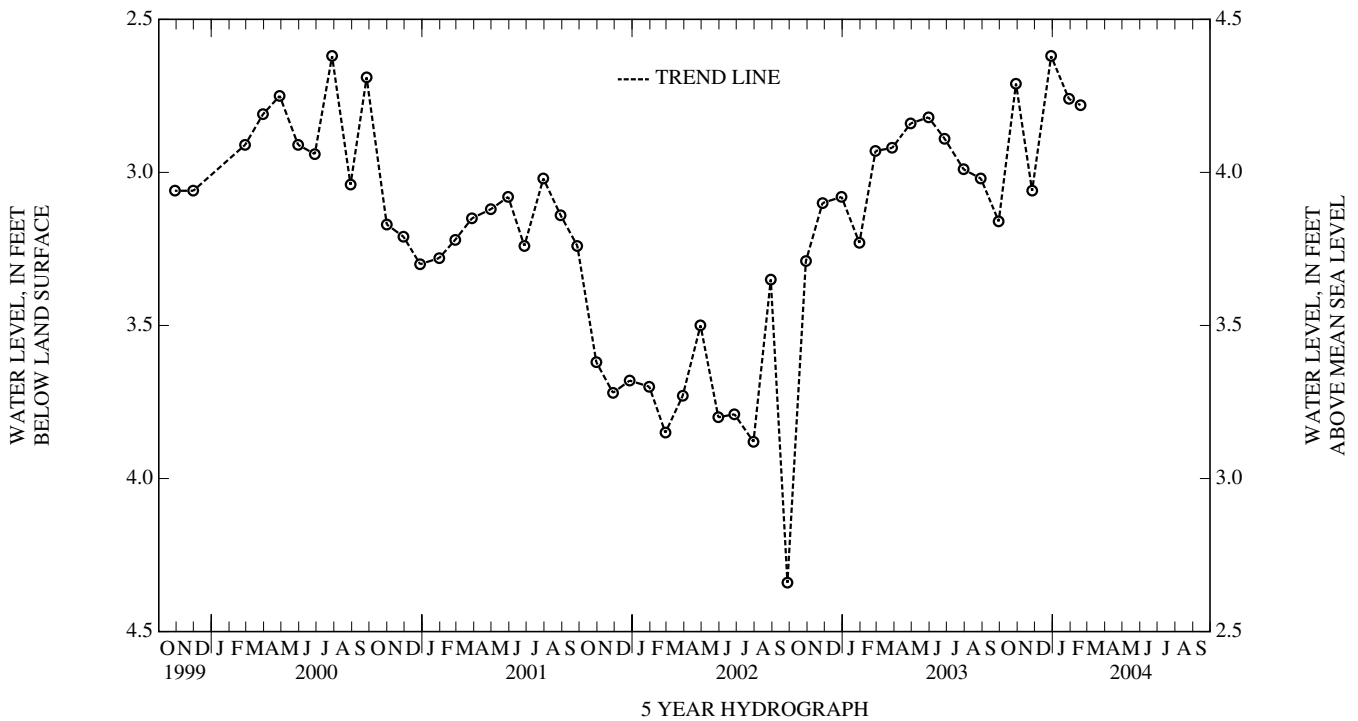
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--July 1947 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.25 ft below land surface, August 30, 1979; lowest measured, 10.72 ft below land surface, August 30, 1947.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	2.71	DEC 29, 2003	2.62	FEB 18, 2004	2.78
NOV 26	3.06	JAN 29, 2004	2.76		
HIGHEST	2.62	DEC 29, 2003			
LOWEST	3.06	NOV 26, 2003			



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WICOMICO COUNTY--Continued

WELL NUMBER.--WI Ce 204. SITE ID.--382404075355401 PERMIT NUMBER.--WI-67-0191.

LOCATION.--Lat 38°24'04", long 75°35'54", Hydrologic Unit 02060007, north side of Naylor Mill Rd., Salisbury. Owner: City of Salisbury.

AQUIFER.--Pensauken Formation (Salisbury aquifer) of Upper Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 113 ft; casing diameter 8 in., to 109 ft; screen diameter 3 in., from 109 to 113 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter floor on cross-brace, 3.14 ft above land surface.

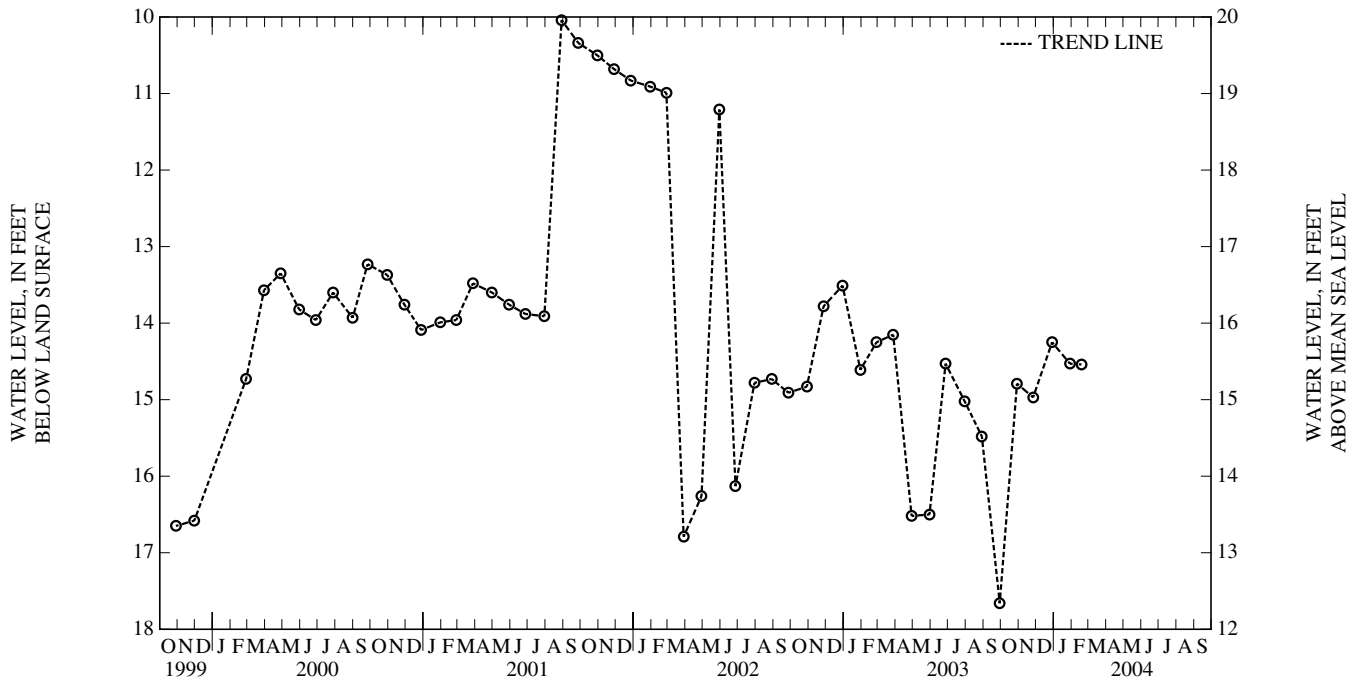
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. The nearby production well was not in use from approximately September 2001 through February 2002, and for some period in May 2002.

PERIOD OF RECORD.--April 1967 to February 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.35 ft below land surface, April 27, 1967; lowest measured, 19.40 ft below land surface, December 29, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	14.79	DEC 29, 2003	14.25	FEB 18, 2004	14.54
NOV 26	14.97	JAN 29, 2004	14.53		
HIGHEST 14.25 DEC 29, 2003					
LOWEST 14.97 NOV 26, 2003					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WICOMICO COUNTY--Continued

WELL NUMBER.--WI Cf 3. SITE ID.--382037075310801.

LOCATION.--Lat 38°20'37", long 75°31'08", Hydrologic Unit 02060007, on Airport Rd., at Salisbury-Wicomico County Regional Airport, Mt. Hermon.
 Owner: Salisbury-Wicomico County Regional Airport.

AQUIFER.--Beaverdam Sand (Salisbury aquifer) of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 110 ft; casing diameter 16 in., to 90 ft; screened from 90 to 110 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from March 1948 to July 1948, August 1949 to April 1960, and August 1963 to August 1968.

DATUM.--Elevation of land surface is 44.79 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

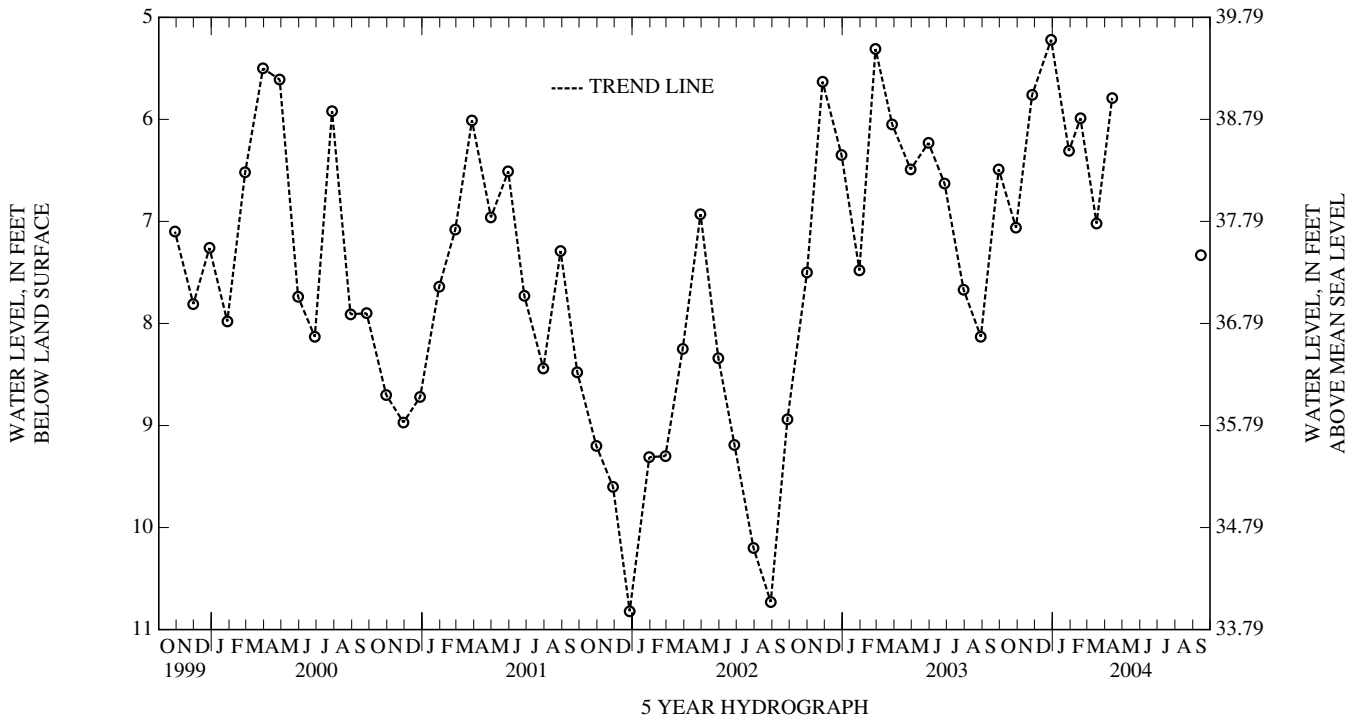
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. A water level was reported as 7.2 ft below land surface on October 26, 1942. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--September 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.18 ft below land surface, May 8, 1958; lowest measured, 13.44 ft below land surface, September 18, 1947.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	7.06	DEC 29, 2003	5.22	FEB 18, 2004	5.99	APR 13, 2004	5.79
NOV 26	5.76	JAN 29, 2004	6.31	MAR 17	7.02	SEP 14	7.33
HIGHEST 5.22 DEC 29, 2003							
LOWEST 7.33 SEP 14, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WICOMICO COUNTY--Continued

WELL NUMBER.--WI Cf 147. SITE ID.--382429075344501.

LOCATION.--Lat 38°24'29", long 75°34'45", Hydrologic Unit 02060007, south side of Naylor Mill Rd., Salisbury. Owner: A.S. Abell Co.

AQUIFER.--Pensauken Formation (Salisbury aquifer) of Upper Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 80 ft; casing diameter 2 in., to 80 ft; perforated casing from 60 to 80 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 41.83 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing at land surface.

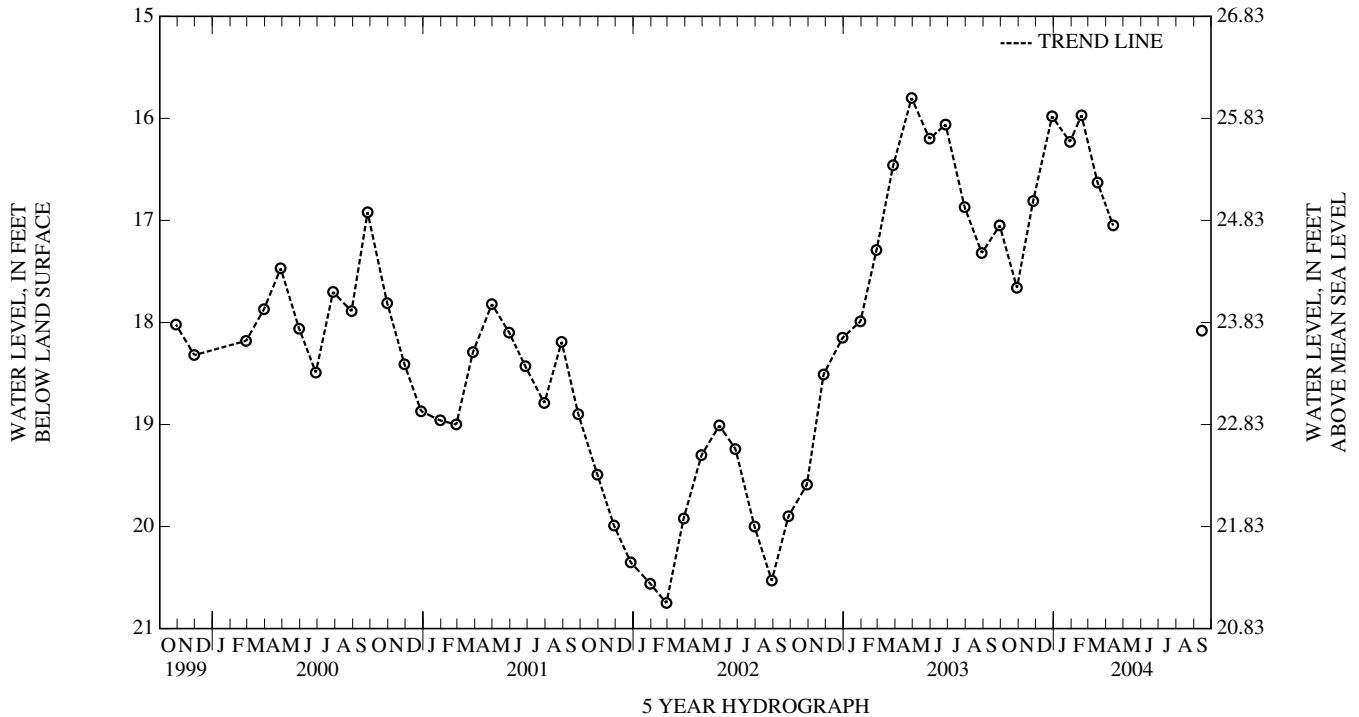
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--November 1964; March 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.78 ft below land surface, June 18, 1979; lowest measured, 21.52 ft below land surface, December 29, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	17.66	DEC 29, 2003	15.98	FEB 18, 2004	15.97	APR 13, 2004	17.05
NOV 26	16.81	JAN 29, 2004	16.23	MAR 17	16.63	SEP 14	18.08
HIGHEST 15.97 FEB 18, 2004							
LOWEST 18.08 SEP 14, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WICOMICO COUNTY--Continued

WELL NUMBER.--WI Cg 20. SITE ID.--382329075263701.

LOCATION.--Lat 38°23'29", long 75°26'37", Hydrologic Unit 02060009, 1.45 mi east of Parsonsburg, south of MD Rt. 346. Owner: Maryland State Highway Administration.

AQUIFER.--Parsonsburg Sand (Columbia aquifer) of Pleistocene age. Aquifer code: 112PRBG.

WELL CHARACTERISTICS.--Driven, unused, water-table well, depth 25 ft, casing diameter 1.25 in., to unknown depth.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 68 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 2 in. sleeve, 0.17 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

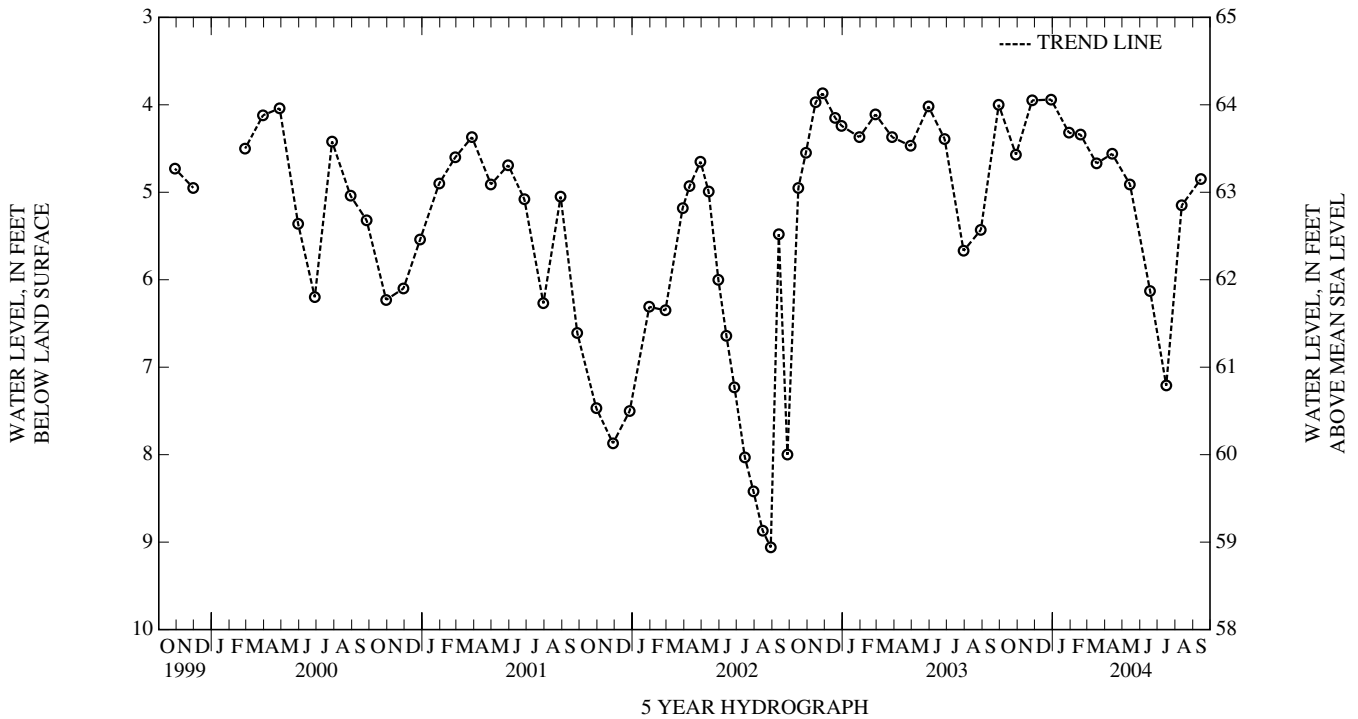
PERIOD OF RECORD.--August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.84 ft below land surface, January 31, 1950; lowest measured, 9.31 ft below land surface, November 30, 1998.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	4.57	JAN 29, 2004	4.32	APR 13, 2004	4.56	JUL 16, 2004	7.21
NOV 26	3.95	FEB 18	4.34	MAY 14	4.91	AUG 12	5.15
DEC 29	3.94	MAR 17	4.67	JUN 18	6.13	SEP 14	4.85

HIGHEST 3.94 DEC 29, 2003
 LOWEST 7.21 JUL 16, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY

WELL NUMBER.--WO Ae 23. SITE ID.--382621075174201. PERMIT NUMBER.--WO-73-0513.

LOCATION.--Lat 38°26'21", long 75°17'42", Hydrologic Unit 02060009, 2.75 mi north of Whaleyville. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 280 ft; casing diameter 4 in., to 270 ft; screen diameter 2 in., from 270 to 280 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 4 in. casing, 3.52 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

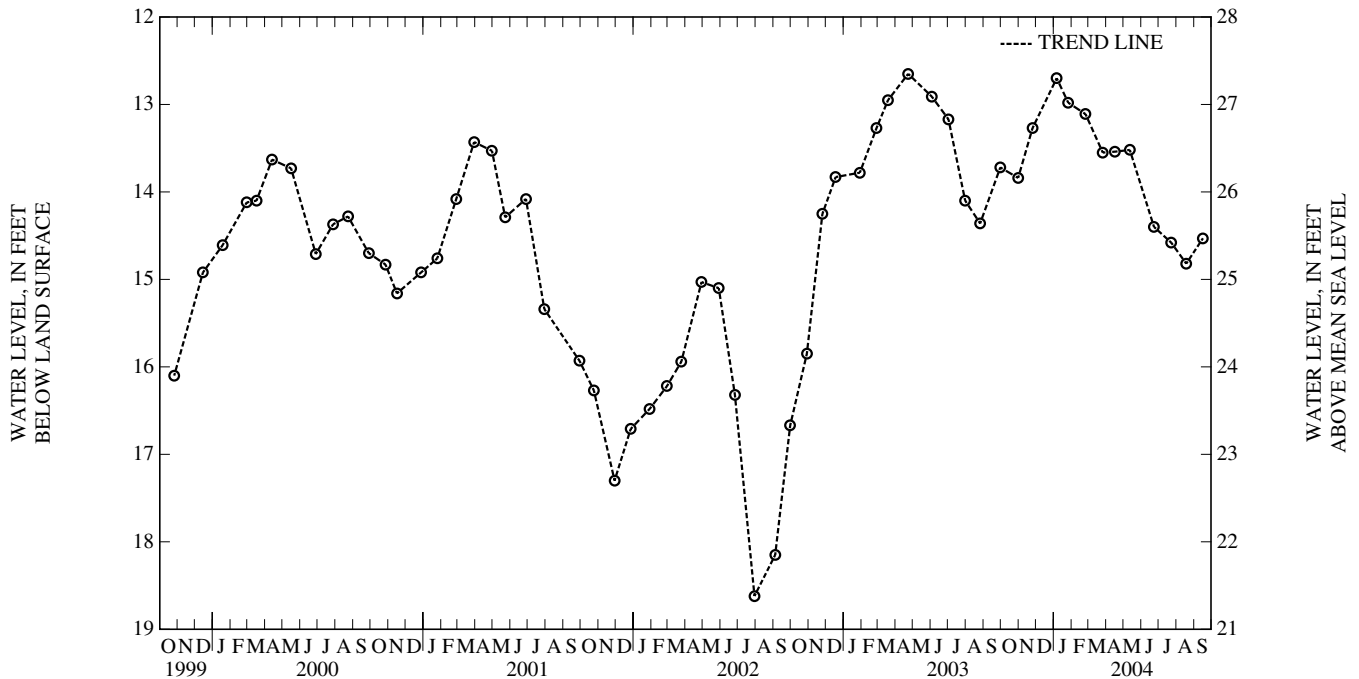
PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.85 ft below land surface, December 16, 1975; lowest measured, 20.18 ft below land surface, September 28, 1995.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	13.84	JAN 26, 2004	12.98	APR 16, 2004	13.54	JUL 23, 2004	14.58
NOV 25	13.27	FEB 25	13.11	MAY 12	13.52	AUG 18	14.82
JAN 06, 2004	12.70	MAR 26	13.55	JUN 23	14.40	SEP 16	14.53

HIGHEST 12.70 JAN 06, 2004
 LOWEST 14.82 AUG 18, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ae 24. SITE ID.--382621075174202. PERMIT NUMBER.--WO-73-0512.

LOCATION.--Lat 38°26'21", long 75°17'42", Hydrologic Unit 02060009, 2.75 mi north of Whaleyville. Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 200 ft; casing diameter 4 in., to 190 ft; screen diameter 2 in., from 190 to 200 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 4 in. casing, 4.00 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

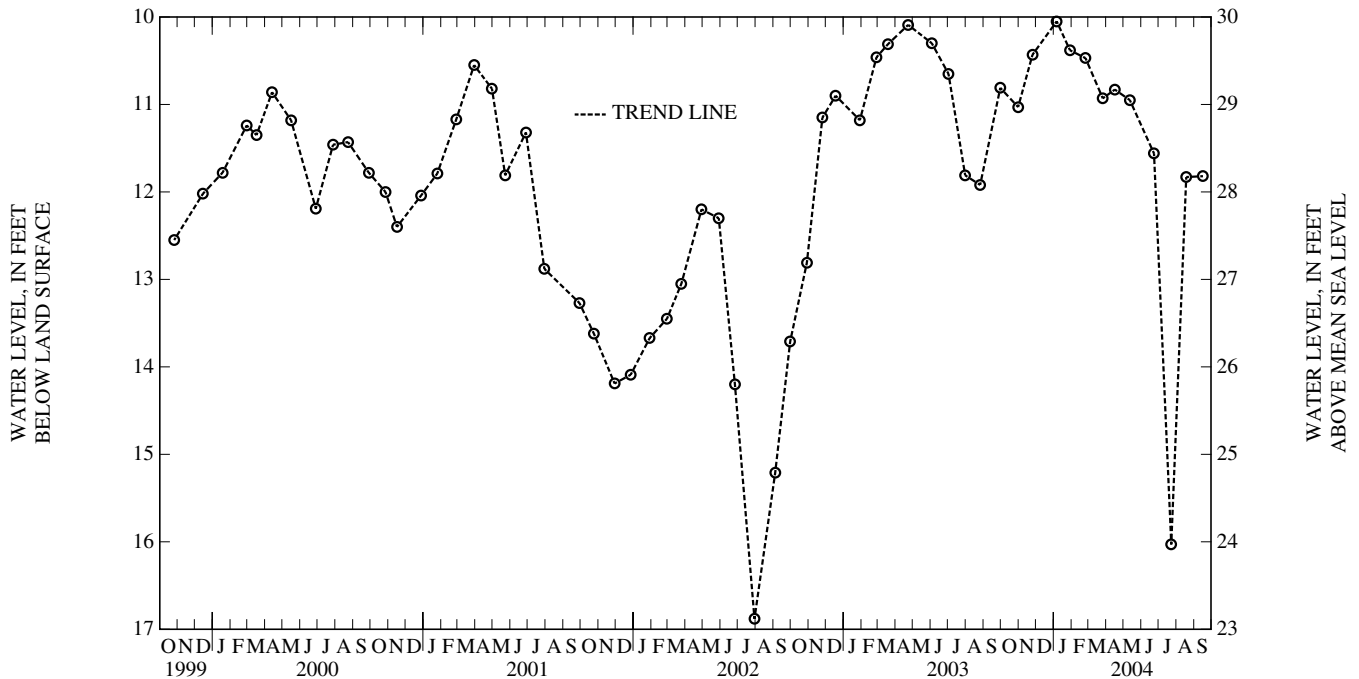
PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.49 ft below land surface, May 31, 1978; lowest measured, 16.88 ft below land surface, July 30, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	11.03	JAN 29, 2004	10.38	APR 16, 2004	10.83	JUL 23, 2004	16.03
NOV 25	10.43	FEB 25	10.47	MAY 12	10.95	AUG 18	11.83
JAN 06, 2004	10.05	MAR 26	10.93	JUN 23	11.56	SEP 16	11.82

HIGHEST 10.05 JAN 06, 2004
 LOWEST 16.03 JUL 23, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ae 25. SITE ID.--382621075174203. PERMIT NUMBER.--WO-73-0514.

LOCATION.--Lat 38°26'21", long 75°17'42", Hydrologic Unit 02060009, 2.75 mi north of Whaleyville. Owner: U.S. Geological Survey.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 118 ft; casing diameter 4 in., to 108 ft; screened diameter 2 in., from 108 to 118 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.20 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

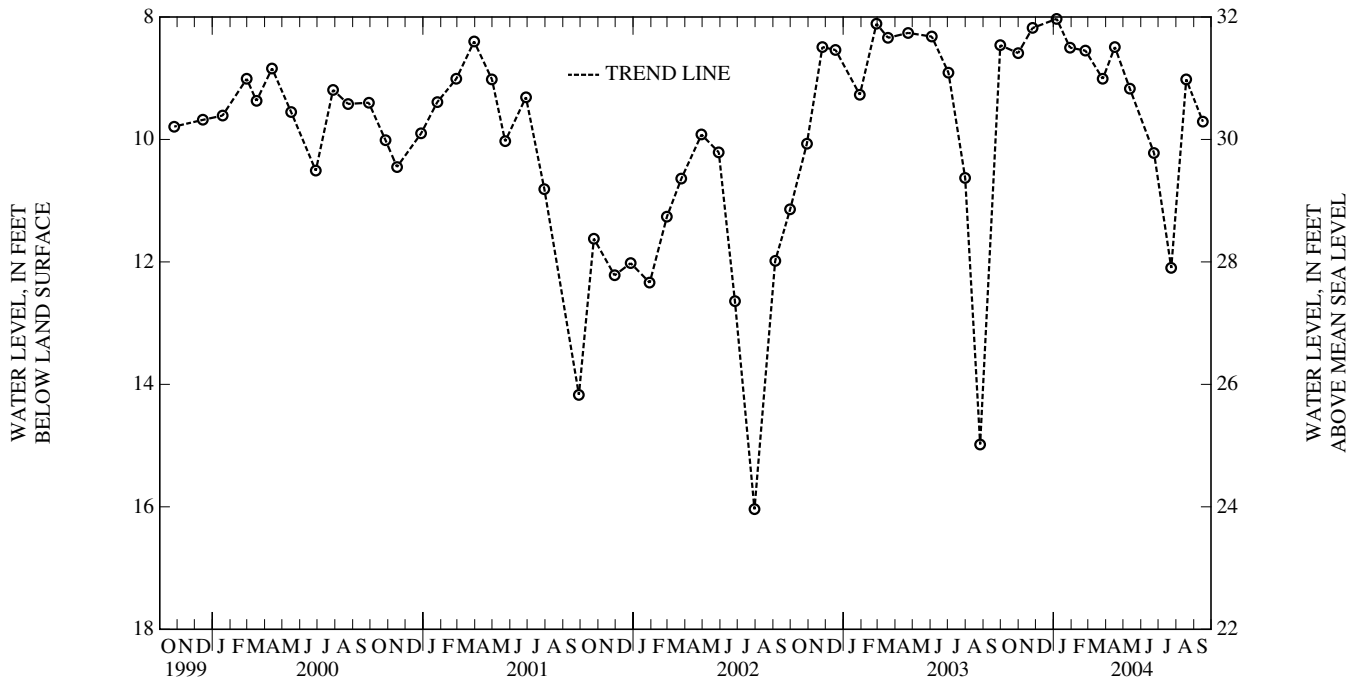
PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.78 ft below land surface, February 20, 1998; lowest measured, 16.04 ft below land surface, July 30, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	8.59	JAN 29, 2004	8.50	APR 16, 2004	8.49	JUL 23, 2004	12.10
NOV 25	8.18	FEB 25	8.55	MAY 12	9.17	AUG 18	9.02
JAN 06, 2004	8.03	MAR 26	9.01	JUN 23	10.22	SEP 16	9.71

HIGHEST 8.03 JAN 06, 2004
 LOWEST 12.10 JUL 23, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ah 6. SITE ID.--382632075031801. PERMIT NUMBER.--WO-70-0009.

LOCATION.--Lat 38°26'32", long 75°03'18", Hydrologic Unit 02060010, at east end of 137th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 357 ft; casing diameter 6 in., to 347 ft; casing diameter 4 in., from 327 to 347 ft; screen diameter 4 in., from 347 to 357 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recording interval, March 1985 to February 1994.

DATUM.--Elevation of land surface is 6.35 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.27 ft above land surface.

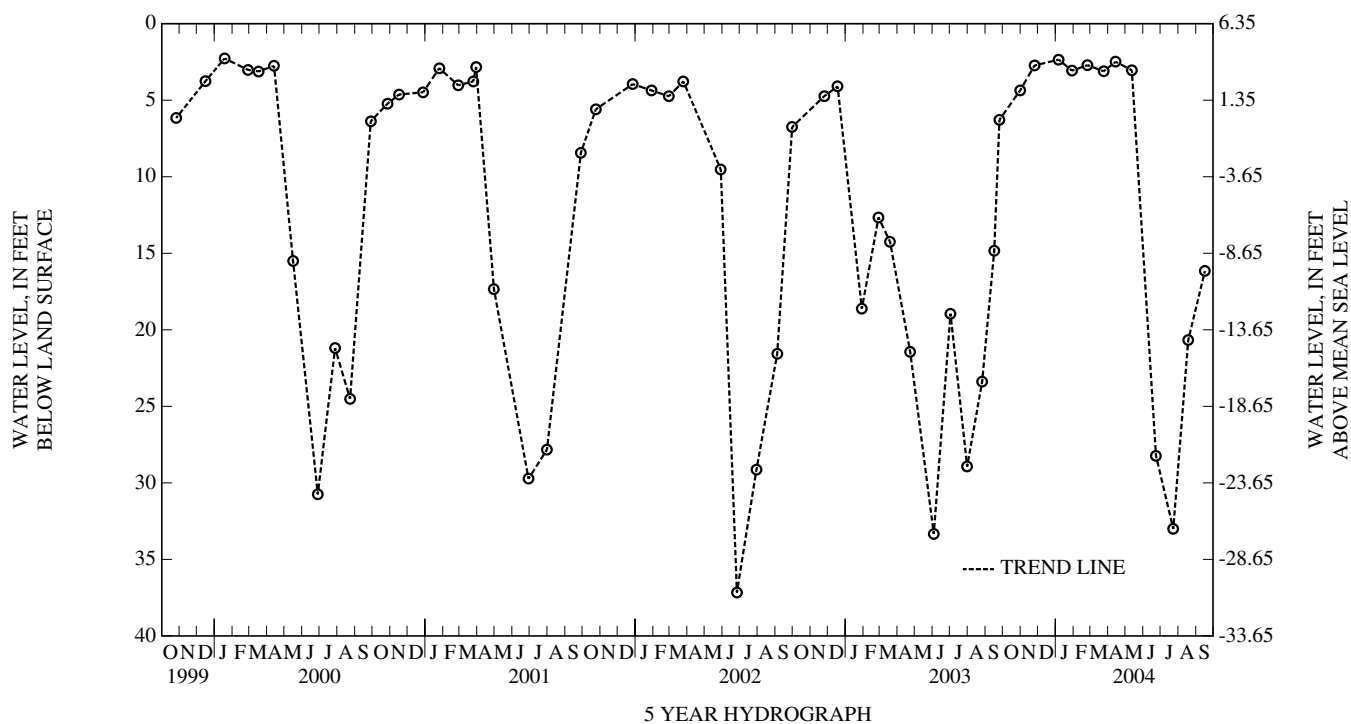
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

PERIOD OF RECORD.--September 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.48 ft above land surface, March 27, 1973; lowest measured, 52.46 ft below land surface, July 24, 1989 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	4.36	JAN 29, 2004	3.07	APR 14, 2004	2.49	JUL 23, 2004	33.00
NOV 25	2.73	FEB 25	2.71	MAY 12	3.04	AUG 18	20.66
JAN 06, 2004	2.35	MAR 24	3.11	JUN 23	28.23	SEP 16	16.16
HIGHEST	2.35	JAN 06, 2004					
LOWEST	33.00	JUL 23, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ah 35. SITE ID.--382635075030601. PERMIT NUMBER.--WO-73-0516.

LOCATION.--Lat 38°26'35", long 75°03'06", Hydrologic Unit 02060010, at east end of 137th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--St. Marys Formation of Middle-Upper Miocene age. Aquifer code: 122SMRS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 726 ft; casing diameter 4 in., to 716 ft; screen diameter 2 in., from 716 to 726 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 13.99 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 in. casing, 3.30 ft above land surface.

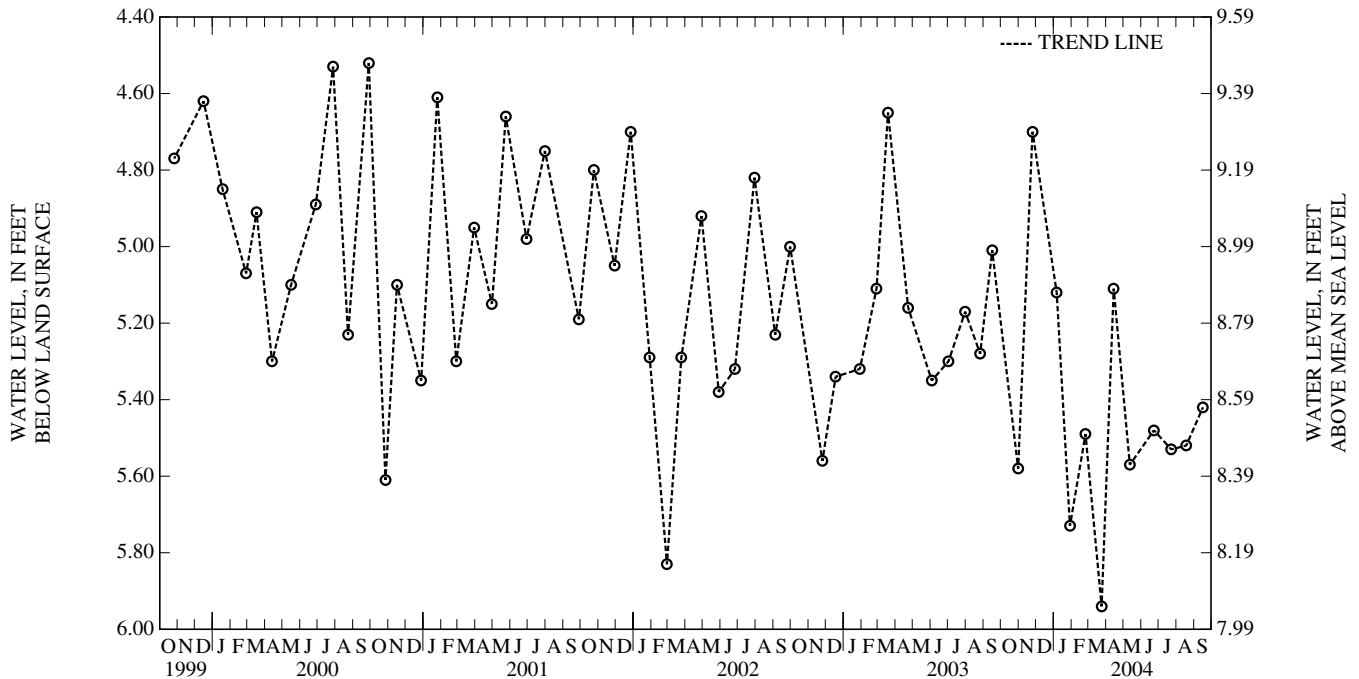
REMARKS.--Ocean City Ground-Water Monitoring Network observation well.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.90 ft below land surface, March 10, 1976; lowest measured, 10.26 ft below land surface, October 28, 1975.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	5.58	JAN 29, 2004	5.73	APR 14, 2004	5.11	JUL 23, 2004	5.53
NOV 25	4.70	FEB 25	5.49	MAY 12	5.57	AUG 18	5.52
JAN 06, 2004	5.12	MAR 24	5.94	JUN 23	5.48	SEP 16	5.42
HIGHEST 4.70 NOV 25, 2003							
LOWEST 5.94 MAR 24, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ah 36. SITE ID.--382635075030602. PERMIT NUMBER.--WO-73-0518.

LOCATION.--Lat 38°26'35", long 75°03'06", Hydrologic Unit 02060010, at east end of 137th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 430 ft; casing diameter 4 in., to 420 ft; screen diameter 2 in., from 420 to 430 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval from May 1994 to May 1997.

DATUM.--Elevation of land surface is 14.32 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 in. casing, 4.09 ft above land surface.

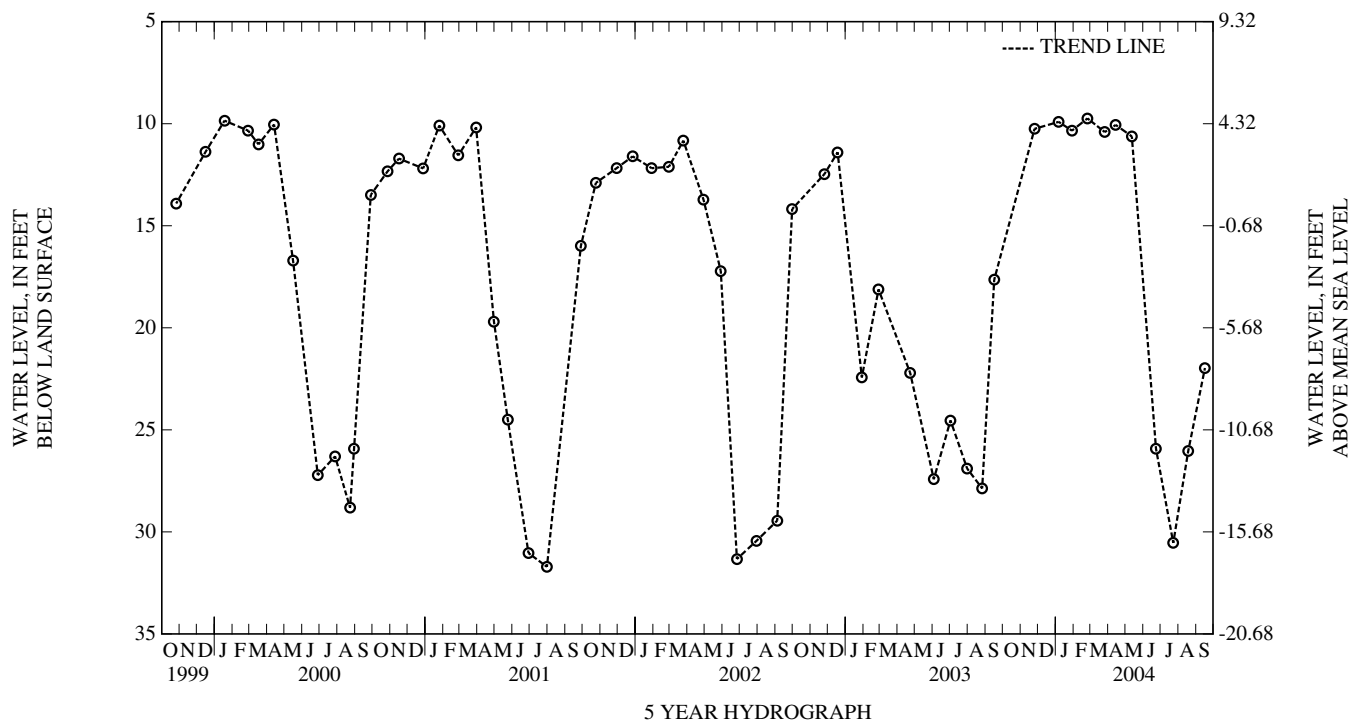
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.23 ft below land surface, February 9, 1997 (recorder); lowest measured, 38.75 ft below land surface, August 30, 1989.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 25, 2003	10.25	FEB 25, 2004	9.74	MAY 12, 2004	10.62	AUG 18, 2004	26.03
JAN 06, 2004	9.91	MAR 26	10.41	JUN 23	25.93	SEP 16	21.97
29	10.34	APR 14	10.06	JUL 23	30.54		
HIGHEST 9.74 FEB 25, 2004							
LOWEST 30.54 JUL 23, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ah 37. SITE ID.--382635075030603. PERMIT NUMBER.--WO-73-0517.

LOCATION.--Lat 38°26'35", long 75°03'06", Hydrologic Unit 02060010, at east end of 137th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 478 ft; casing diameter 4 in., to 468 ft; screen diameter 2 in., from 468 to 478 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval from May 1997 to current year.

DATUM.--Elevation of land surface is 13.89 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 in. casing, 3.10 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.58 ft below land surface, February 10, 1977; lowest measured, 41.42 ft below land surface, August 30, 1989.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

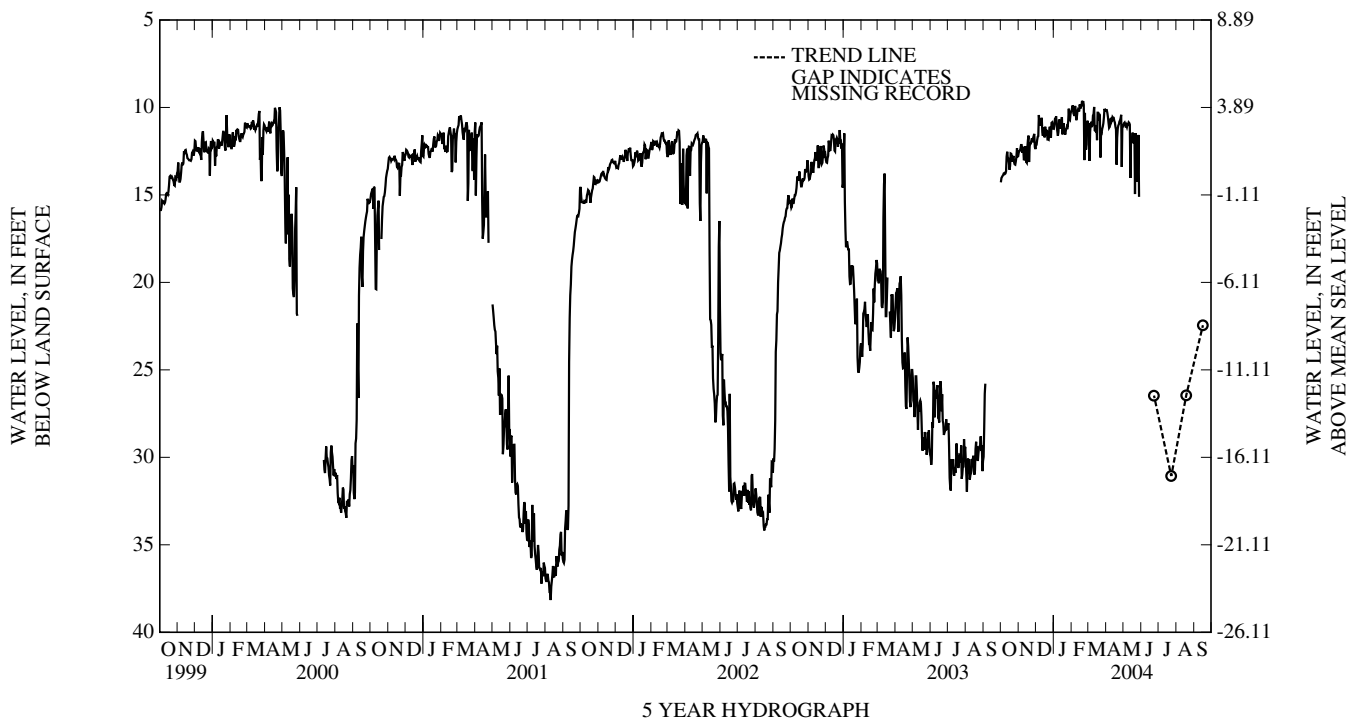
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	11.56	JAN 29, 2004	10.65	APR 14, 2004	10.32	JUL 23, 2004	31.07
NOV 25	10.53	FEB 25	10.12	MAY 12	10.86	AUG 18	26.45
JAN 06, 2004	10.17	MAR 24	10.46	JUN 23	26.47	SEP 16	22.45
HIGHEST	10.12	FEB 25, 2004					
LOWEST	31.07	JUL 23, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.28	12.75	12.59	11.29	12.15	11.02	11.22	10.40	10.15	9.20	11.37	9.80
2	14.03	12.61	12.49	11.23	12.13	11.02	10.93	10.00	9.96	8.92	10.92	9.67
3	13.97	12.74	12.47	11.23	11.87	10.89	10.65	9.56	9.88	8.56	13.06	9.80
4	13.91	12.72	12.36	11.09	11.68	10.63	10.64	9.47	10.33	8.62	11.40	9.91
5	13.86	12.69	12.15	10.87	11.64	9.38	10.50	9.14	10.41	8.95	10.98	9.48
6	13.77	12.39	12.15	10.84	10.43	8.95	11.06	9.23	10.48	8.72	10.82	9.24
7	13.75	12.28	12.58	10.71	10.91	9.31	11.35	9.79	9.91	8.18	11.12	9.43
8	13.80	12.43	12.25	10.93	10.96	9.61	11.62	10.17	10.28	8.75	11.00	8.86
9	13.77	12.47	12.42	11.01	10.95	9.63	11.40	9.73	10.73	9.30	10.46	8.92
10	13.64	11.81	13.02	11.25	11.03	9.60	10.69	9.25	10.54	8.75	10.38	8.46
11	12.81	11.40	12.93	11.01	10.59	8.95	10.81	9.45	10.20	8.82	9.97	8.50
12	12.53	11.22	12.21	10.82	11.43	10.06	11.22	9.95	10.11	8.78	11.31	8.50
13	12.87	11.63	12.59	10.97	11.62	10.28	10.85	9.59	10.16	8.72	11.34	9.45
14	12.91	11.58	13.11	12.01	11.23	9.27	10.81	9.52	10.23	8.83	11.10	9.96
15	13.18	11.80	13.16	11.84	11.15	9.66	10.55	9.33	9.83	8.72	11.02	9.61
16	13.56	12.60	12.30	11.22	11.71	10.71	11.54	9.75	10.07	8.28	11.87	9.54
17	13.35	12.22	11.86	10.91	11.10	9.92	11.22	10.03	9.94	8.56	10.30	8.90
18	12.63	11.69	11.61	10.62	11.62	9.90	10.90	9.49	9.90	8.09	10.30	8.80
19	12.65	11.76	13.12	10.47	11.37	10.16	11.20	8.91	9.62	7.88	10.34	8.74
20	12.78	11.71	12.22	10.39	11.28	9.61	11.47	9.39	9.74	7.88	10.59	9.03
21	13.09	11.91	12.05	10.44	11.83	9.55	11.55	9.65	9.64	7.90	10.54	9.12
22	12.85	11.21	12.05	10.17	11.83	10.12	11.27	9.24	9.86	8.41	12.86	9.40
23	12.77	11.14	11.89	9.91	11.85	9.65	11.24	9.24	13.01	8.51	11.44	10.06
24	13.14	11.37	11.76	9.67	11.39	9.05	11.07	9.24	10.31	8.63	11.47	10.04
25	13.25	11.41	11.99	9.59	11.10	9.14	11.11	9.58	11.94	8.65	11.22	10.00
26	13.27	11.33	11.75	9.81	11.61	9.86	10.77	9.10	12.41	9.80	11.10	10.00
27	13.07	10.96	11.63	9.87	11.73	9.95	10.07	8.95	12.12	9.83	10.91	9.88
28	12.81	10.83	11.51	9.81	10.88	9.52	10.68	8.98	10.84	9.94	10.55	9.30
29	12.33	10.50	12.26	10.47	10.85	9.77	10.72	9.42	10.76	9.95	10.08	9.15
30	12.81	11.30	12.38	11.38	11.05	9.88	10.36	9.32	---	---	10.17	9.28
31	12.79	11.28	---	---	11.21	10.20	10.22	9.34	---	---	10.14	9.26
MONTH	14.28	10.50	13.16	9.59	12.15	8.95	11.62	8.91	13.01	7.88	13.06	8.46

WORCESTER COUNTY--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.17	8.88	10.99	9.76	---	---	---	---	---	---	---	---
2	10.16	8.90	10.90	9.34	---	---	---	---	---	---	---	---
3	10.32	8.81	10.86	9.10	---	---	---	---	---	---	---	---
4	10.56	8.88	10.96	9.25	---	---	---	---	---	---	---	---
5	10.87	9.33	11.14	9.10	---	---	---	---	---	---	---	---
6	11.16	9.36	11.02	9.08	---	---	---	---	---	---	---	---
7	11.10	9.02	11.12	9.28	---	---	---	---	---	---	---	---
8	10.68	8.87	10.98	9.24	---	---	---	---	---	---	---	---
9	10.65	9.02	10.97	9.25	---	---	---	---	---	---	---	---
10	10.82	9.16	10.85	9.46	---	---	---	---	---	---	---	---
11	10.73	9.39	10.89	9.49	---	---	---	---	---	---	---	---
12	10.55	9.33	10.98	9.71	---	---	---	---	---	---	---	---
13	10.60	8.98	14.03	9.82	---	---	---	---	---	---	---	---
14	10.60	9.23	12.00	10.12	---	---	---	---	---	---	---	---
15	10.77	9.27	11.94	10.18	---	---	---	---	---	---	---	---
16	10.86	9.49	11.84	10.20	---	---	---	---	---	---	---	---
17	11.10	9.60	11.44	10.06	---	---	---	---	---	---	---	---
18	11.26	9.71	11.96	10.54	---	---	---	---	---	---	---	---
19	13.27	9.88	12.06	10.28	---	---	---	---	---	---	---	---
20	11.73	9.87	11.52	10.10	---	---	---	---	---	---	---	---
21	11.21	9.52	14.95	10.55	---	---	---	---	---	---	---	---
22	11.03	9.74	11.46	10.13	---	---	---	---	---	---	---	---
23	10.96	9.54	13.06	10.24	---	---	---	---	---	---	---	---
24	10.80	9.65	13.98	10.36	---	---	---	---	---	---	---	---
25	10.74	9.62	14.23	10.44	---	---	---	---	---	---	---	---
26	10.61	9.55	13.74	10.40	---	---	---	---	---	---	---	---
27	10.42	9.46	11.57	10.66	---	---	---	---	---	---	---	---
28	13.40	9.61	15.11	10.31	---	---	---	---	---	---	---	---
29	11.03	10.17	---	---	---	---	---	---	---	---	---	---
30	11.06	10.04	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	13.40	8.81	15.11	9.08	---	---	---	---	---	---	---	---
YEAR	15.11	7.88										

Daily Low Water Levels



WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 1. SITE ID.--382022075072401.

LOCATION.--Lat 38°20'22", long 75°07'24", Hydrologic Unit 02060010, 0.4 mi east of Herring Creek on U.S. Rt. 50. Owner: MD State Highway Administration.

AQUIFER.--Sinepuxent Formation (Columbia aquifer) of Pleistocene age. Aquifer code: 112SNPX.

WELL CHARACTERISTICS.--Driven, water-table well, depth 14 ft; casing diameter 1.25 in., to 14 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.25 ft above land surface.

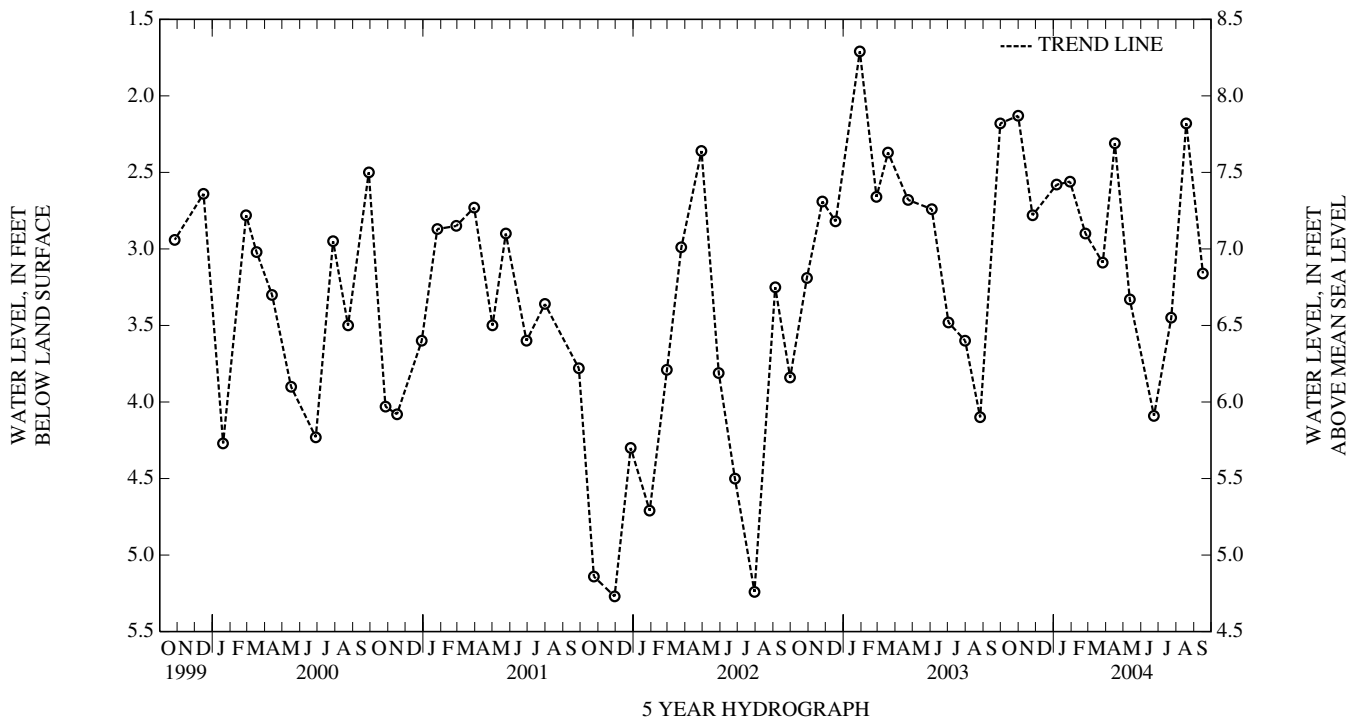
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.41 ft below land surface, March 8, 1962; lowest measured, 8.61 ft below land surface, May 14, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	2.13	JAN 29, 2004	2.56	APR 16, 2004	2.31	JUL 23, 2004	3.45
NOV 25	2.78	FEB 25	2.90	MAY 12	3.33	AUG 18	2.18
JAN 06, 2004	2.58	MAR 26	3.09	JUN 23	4.09	SEP 16	3.16
HIGHEST 2.13 OCT 31, 2003							
LOWEST 4.09 JUN 23, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 15. SITE ID.--382359075094501. PERMIT NUMBER.--WO-68-0066.

LOCATION.--Lat 38°23'59", long 75°09'45", Hydrologic Unit 02060010, south side of Beauchamp Rd. at Ocean Pines. Owner: Ocean Pines.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 318 ft; casing diameter 6 in., to 288 ft; screen diameter 6 in., from 288 to 318 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 6 in. casing, 5.50 ft above land surface.

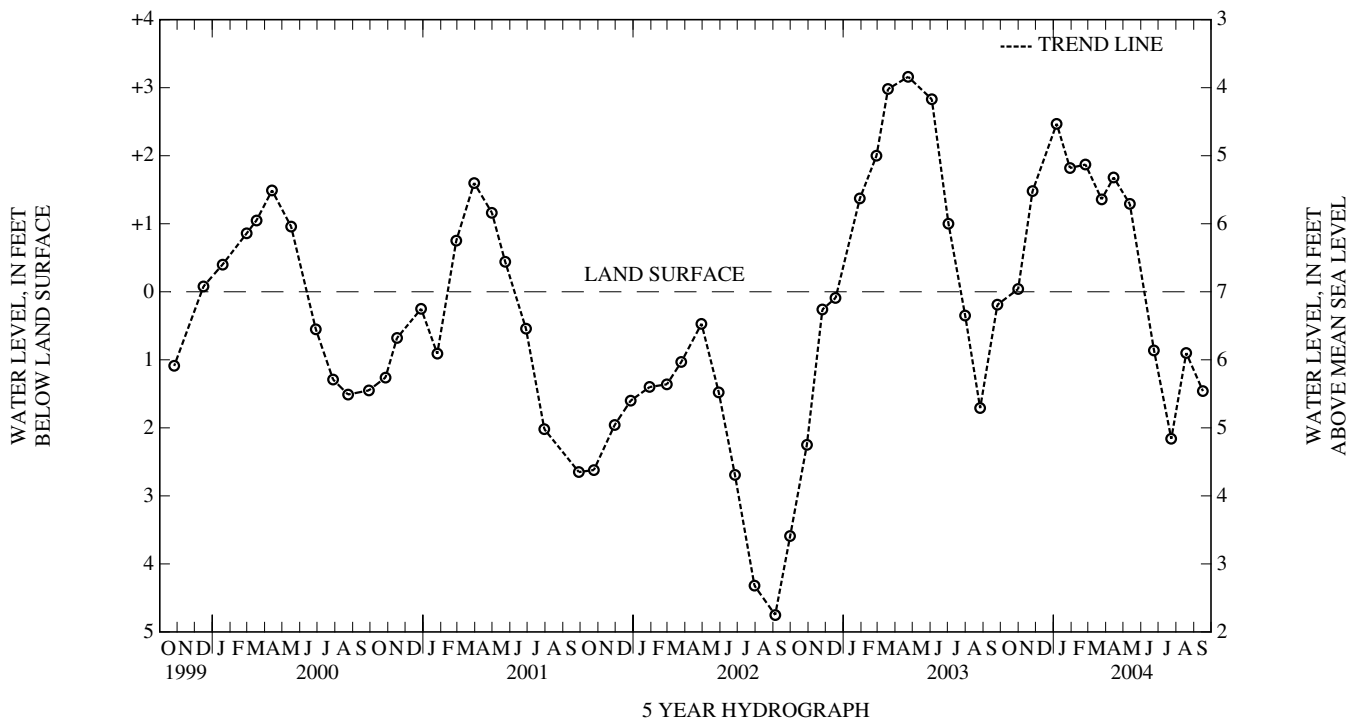
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

PERIOD OF RECORD.--September 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.13 ft above land surface, February 29, 1972; lowest measured, 4.75 ft below land surface, September 4, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	+0.04	JAN 29, 2004	+1.82	APR 14, 2004	+1.68	JUL 23, 2004	2.16
NOV 25	+1.48	FEB 25	+1.87	MAY 12	+1.29	AUG 18	.90
JAN 06, 2004	+2.47	MAR 24	+1.36	JUN 23	.86	SEP 16	1.46
HIGHEST +2.47 JAN 06, 2004							
LOWEST 2.16 JUL 23, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 45. SITE ID.--382358075094501. PERMIT NUMBER.--WO-68-0066.

LOCATION.--Lat 38°23'58", long 75°09'45", Hydrologic Unit 02060010, south side of Beauchamp Rd. at Ocean Pines. Owner: Ocean Pines.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 77 ft; casing diameter 2 in., to 56 ft; screen diameter 3 in., from 56 to 77 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 2 in. casing, 1.60 ft above land surface. Measuring point changed to top of casing, 0.69 on June 3, 2003, when the casing was cut lower.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels may be affected by local ground-water withdrawal.

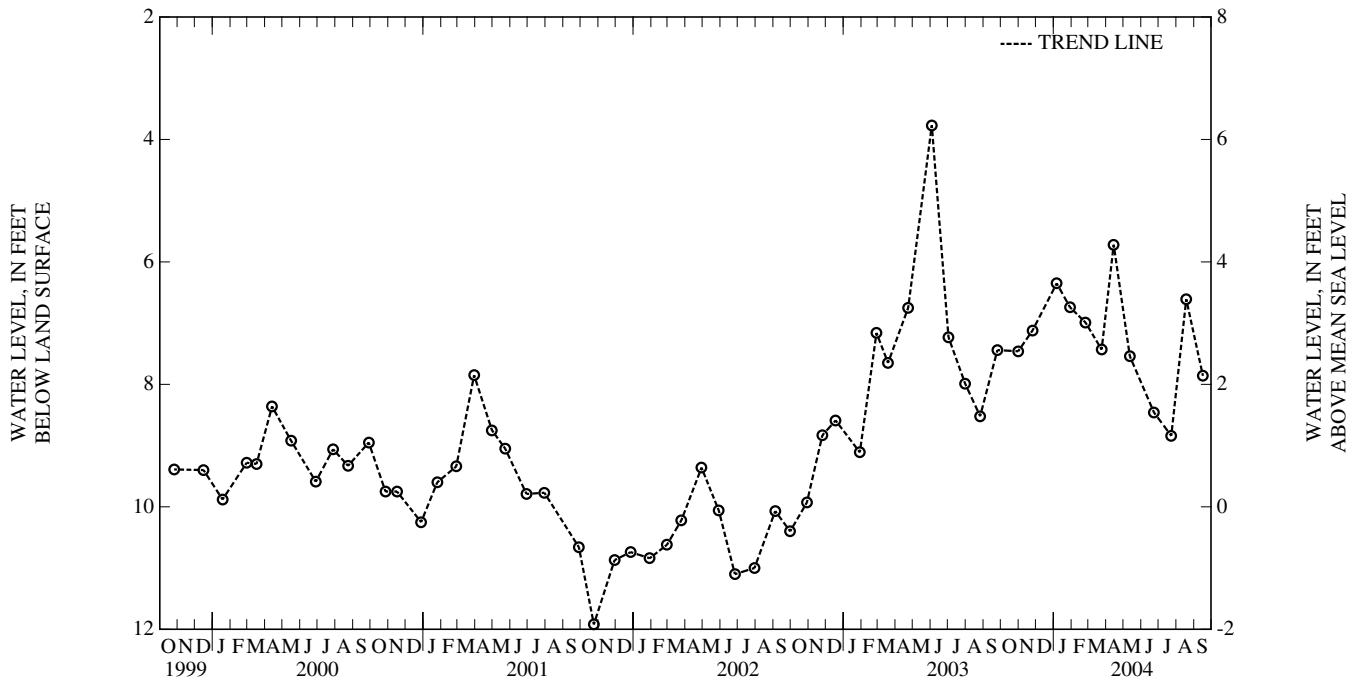
PERIOD OF RECORD.--October 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.77 ft below land surface, June 3, 2003; lowest measured, 11.92 ft below land surface, October 24, 2001.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	7.46	JAN 29, 2004	6.74	APR 14, 2004	5.72	JUL 23, 2004	8.84
NOV 25	7.12	FEB 25	6.99	MAY 12	7.54	AUG 18	6.61
JAN 06, 2004	6.35	MAR 24	7.43	JUN 23	8.46	SEP 16	7.86

HIGHEST 5.72 APR 14, 2004
 LOWEST 8.84 JUL 23, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 46. SITE ID.--382358075094502 PERMIT NUMBER.--WO-68-0066

LOCATION.--Lat 38°23'58", long 75°09'45", Hydrologic Unit 02060010, south side of Beauchamp Rd. at Ocean Pines. Owner: Ocean Pines

AQUIFER.--Pocomoke aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 199.5 ft; casing diameter 6 in., to 53.7 ft; casing diameter 4 in., from 53.7 to 164.2 ft, and 194.5 to 199.5 ft; screen diameter 6 in., from 164.2 to 194.5 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 2 in. coupling, 2.50 ft above land surface.

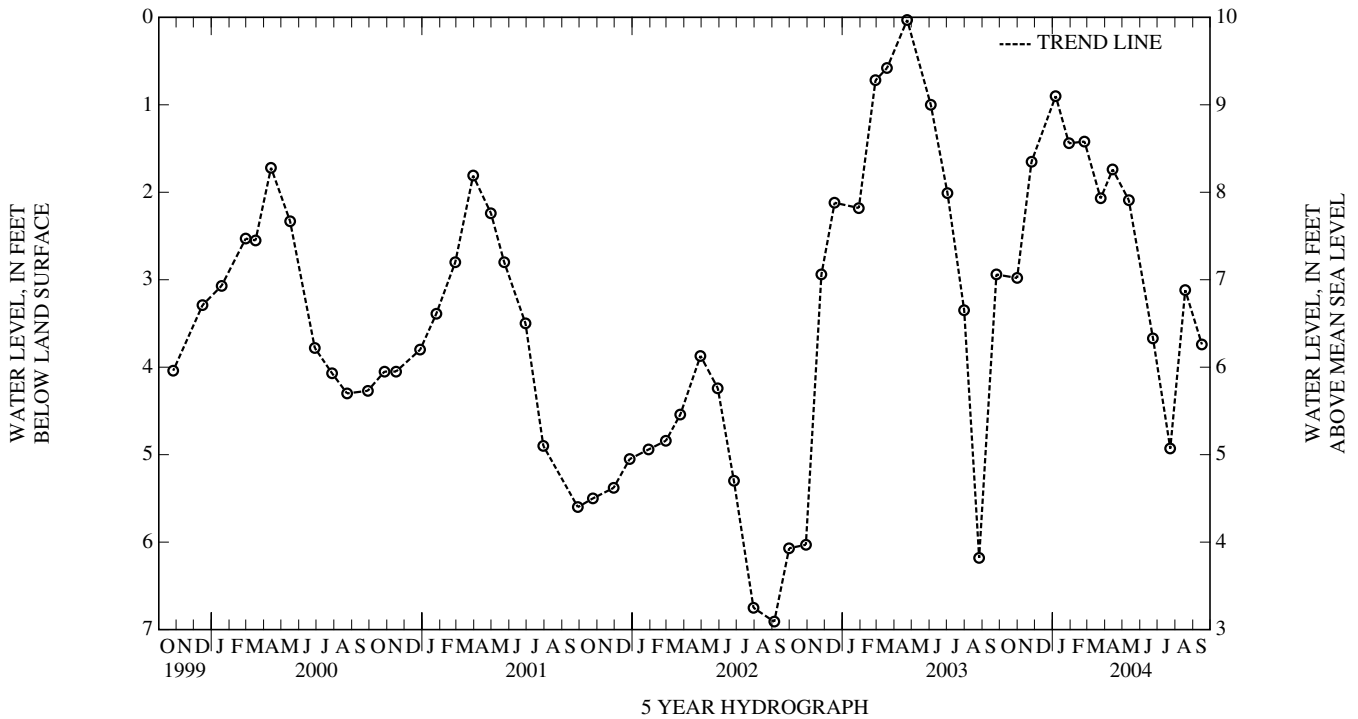
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--October 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.52 ft above land surface, February 10, 1998; lowest measured, 6.91 ft below land surface, September 4, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	2.98	JAN 29, 2004	1.44	APR 14, 2004	1.74	JUL 23, 2004	4.93
NOV 25	1.65	FEB 25	1.42	MAY 12	2.09	AUG 18	3.12
JAN 06, 2004	.90	MAR 24	2.07	JUN 23	3.67	SEP 16	3.74
HIGHEST	.90	JAN 06, 2004					
LOWEST	4.93	JUL 23, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 47. SITE ID.--382325075063301. PERMIT NUMBER.--WO-73-0522.

LOCATION.--Lat 38°23'25", long 75°06'33", Hydrologic Unit 02060010, at intersection of MD Rt. 90 and Isle of Wight Rd., Isle of Wight. Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 268 ft; casing diameter 4 in., to 258 ft; screen diameter 2 in., from 258 to 268 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval from July 1985 to current year.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 4.07 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

PERIOD OF RECORD.--September 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.71 ft below land surface, February 5, 1998 (recorder); lowest measured, 15.42 ft below land surface, August 16, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	7.19	JAN 29, 2004	5.53	APR 14, 2004	5.04	JUL 23, 2004	10.10
NOV 25	5.16	FEB 25	5.16	MAY 12	6.05	AUG 18	9.97
JAN 06, 2004	4.52	MAR 24	5.66	JUN 23	8.25	SEP 16	8.87

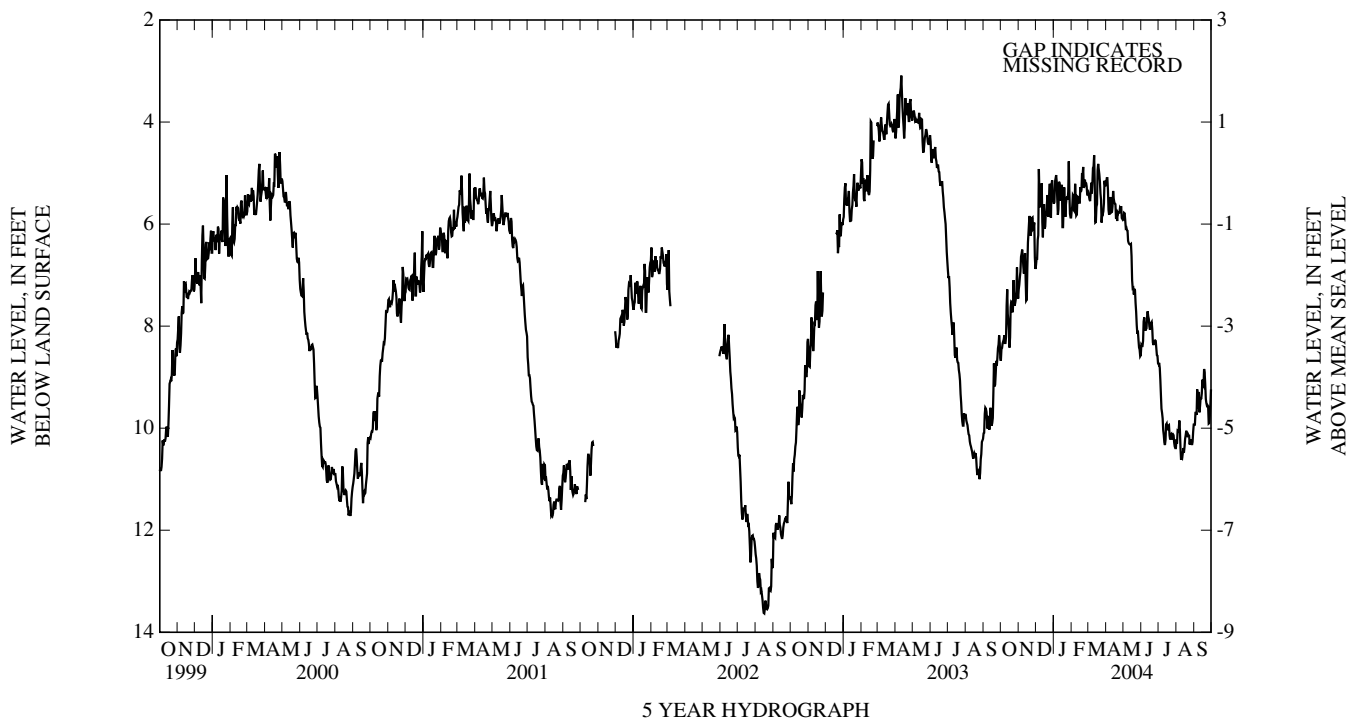
HIGHEST 4.52 JAN 06, 2004
 LOWEST 10.10 JUL 23, 2004

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	8.68	7.98	7.28	6.65	6.81	6.18	5.60	5.33	5.74	5.29	5.39	4.96
2	8.45	7.85	7.19	6.56	6.68	6.24	5.57	4.96	5.65	5.06	5.45	4.88
3	8.43	7.80	7.04	6.52	6.68	6.07	5.17	4.61	5.43	4.68	5.52	5.12
4	8.34	7.76	6.93	6.38	6.31	5.80	5.11	4.59	5.45	4.83	5.55	5.00
5	8.30	7.84	6.64	6.07	6.22	4.75	5.04	4.34	5.73	5.25	5.39	4.79
6	8.26	7.68	6.58	6.09	4.92	4.29	5.17	4.44	5.75	4.93	5.19	4.67
7	8.18	7.66	6.50	5.99	5.43	4.73	5.53	5.10	5.21	4.63	5.40	4.81
8	8.33	7.79	6.63	6.12	5.67	5.09	5.82	5.43	5.56	4.93	5.19	4.41
9	8.33	7.90	6.83	6.25	5.58	4.99	5.71	4.86	5.83	5.41	4.90	4.41
10	8.21	7.35	6.97	6.43	5.63	4.84	5.17	4.56	5.81	5.13	4.87	4.38
11	7.60	6.89	6.79	6.09	5.20	4.17	5.20	4.70	5.46	5.00	4.65	4.19
12	7.28	6.72	6.57	5.89	5.97	5.20	5.54	5.03	5.47	5.02	5.15	4.07
13	7.76	7.04	7.08	6.01	6.26	5.63	5.42	4.89	5.50	4.91	5.97	4.85
14	7.90	7.10	7.50	7.08	5.78	4.45	5.33	5.00	5.58	5.01	5.96	5.41
15	8.09	7.08	7.48	6.85	5.61	4.58	5.23	4.72	5.58	4.93	5.66	5.01
16	8.42	8.02	6.86	6.08	6.09	5.61	6.06	5.08	5.28	4.58	5.61	4.63
17	8.22	7.53	6.36	5.79	6.05	5.02	6.06	5.31	5.37	4.82	4.95	4.26
18	7.63	6.93	6.16	5.58	5.79	5.03	5.62	4.86	5.33	4.57	4.82	4.29
19	7.52	7.09	5.96	5.24	5.80	5.30	5.28	4.42	5.00	4.33	4.92	4.35
20	7.53	7.02	5.84	5.38	5.60	4.87	5.56	4.97	5.05	4.34	5.02	4.49
21	7.73	7.29	6.08	5.54	5.43	4.80	5.86	5.24	4.88	4.33	5.16	4.50
22	7.64	6.69	6.23	5.46	5.77	5.29	5.61	4.81	5.29	4.55	5.40	4.77
23	7.10	6.57	5.99	5.24	5.86	5.04	5.50	4.89	5.26	4.73	5.53	5.03
24	7.46	6.82	5.88	5.04	5.41	4.36	5.46	4.84	5.13	4.68	5.97	5.19
25	7.60	6.97	5.87	5.13	5.21	4.49	5.52	5.03	5.22	4.73	5.80	5.43
26	7.54	6.90	6.09	5.33	5.66	5.08	5.37	4.67	5.19	4.81	5.81	5.38
27	7.46	6.62	6.07	5.33	5.88	5.20	4.77	4.30	5.26	4.79	5.75	5.36
28	7.30	6.51	5.97	5.18	5.23	4.58	5.37	4.42	5.42	4.89	5.59	5.07
29	6.85	6.12	6.65	5.49	5.14	4.73	5.80	5.12	5.42	5.07	5.15	4.57
30	7.30	6.76	6.88	6.58	5.44	4.79	5.87	5.45	---	---	5.24	4.71
31	7.46	6.76	---	---	5.53	5.18	5.87	5.50	---	---	5.24	4.82
MONTH	8.68	6.12	7.50	5.04	6.81	4.17	6.06	4.30	5.83	4.33	5.97	4.07

WORCESTER COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	5.18	4.55	5.91	5.42	8.37	7.61	8.75	7.99	10.22	9.55	9.93	9.34				
2	5.10	4.60	5.78	5.14	8.39	7.59	8.72	7.97	10.30	9.55	9.93	9.35				
3	5.10	4.59	5.79	5.22	8.39	7.61	8.82	7.97	10.05	9.54	9.70	9.14				
4	5.34	4.70	5.92	5.32	8.29	7.39	9.05	8.10	10.06	9.45	9.70	9.21				
5	5.72	5.15	6.08	5.39	7.91	7.21	9.35	8.41	10.02	9.49	9.74	8.87				
6	5.82	5.25	6.07	5.39	7.83	7.13	9.62	8.79	9.85	9.35	9.24	8.71				
7	5.69	4.95	6.12	5.37	8.00	7.13	9.70	9.11	10.03	9.54	9.49	8.97				
8	5.47	4.90	6.13	5.51	8.09	7.45	9.81	9.23	10.39	9.87	9.61	8.92				
9	5.56	4.78	6.33	5.53	8.04	7.58	10.04	9.49	10.62	10.08	9.29	8.82				
10	5.77	5.00	6.37	5.79	8.04	7.51	10.14	9.67	10.56	9.98	9.69	9.11				
11	5.76	5.17	6.39	5.80	7.81	7.10	10.28	9.77	10.58	9.98	9.56	8.88				
12	5.65	5.11	6.40	5.93	7.71	7.24	10.33	9.73	10.49	9.82	9.40	8.75				
13	5.35	4.63	6.40	5.99	7.81	7.26	10.23	9.50	10.39	9.81	9.43	8.85				
14	5.50	4.87	6.39	5.94	7.86	7.35	9.93	9.24	10.48	9.70	9.32	8.70				
15	5.57	5.13	6.63	6.20	8.01	7.43	9.91	9.23	10.37	9.74	9.05	8.47				
16	5.60	5.19	7.10	6.50	8.07	7.43	10.01	9.32	10.21	9.56	9.15	8.54				
17	5.61	5.22	7.26	6.72	7.94	7.31	10.04	9.37	10.14	9.54	9.17	8.49				
18	5.89	5.37	7.25	6.72	7.94	7.31	9.95	9.18	10.05	9.54	8.84	8.27				
19	5.81	5.37	7.38	6.75	7.92	7.32	9.94	9.18	10.10	9.58	8.91	8.32				
20	5.94	5.38	7.27	6.74	8.06	7.34	10.14	9.37	10.14	9.66	9.14	8.69				
21	5.77	5.11	7.30	6.74	8.32	7.57	10.22	9.60	10.12	9.66	9.43	8.81				
22	5.79	5.10	7.55	6.82	8.37	7.87	10.12	9.67	10.15	9.51	9.51	8.80				
23	5.77	5.28	7.72	7.05	8.33	7.88	10.11	9.62	10.15	9.56	9.56	8.86				
24	5.77	5.20	7.98	7.26	8.29	7.80	10.22	9.76	10.32	9.61	9.55	8.81				
25	5.68	5.32	8.15	7.53	8.28	7.82	10.13	9.55	10.22	9.53	9.57	9.00				
26	5.70	5.14	8.09	7.55	8.29	7.83	10.12	9.50	10.26	9.53	9.91	9.33				
27	5.65	5.14	8.27	7.65	8.43	7.99	10.14	9.49	10.27	9.55	9.90	9.26				
28	5.88	5.32	8.42	7.86	8.57	7.96	10.28	9.46	10.33	9.60	9.75	8.97				
29	5.90	5.54	8.46	8.05	8.58	7.93	10.36	9.62	10.27	9.56	9.53	8.69				
30	5.92	5.57	8.59	8.12	8.73	8.04	10.39	9.59	10.07	9.25	9.24	8.69				
31	---	---	8.57	7.84	---	---	10.39	9.63	9.93	9.25	---	---				
MONTH	5.94	4.55	8.59	5.14	8.73	7.10	10.39	7.97	10.62	9.25	9.93	8.27				
YEAR	10.62	4.07														

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 48. SITE ID.--382325075063302. PERMIT NUMBER.--WO-73-0521.

LOCATION.--Lat 38°23'25", long 75°06'33", Hydrologic Unit 02060010, at intersection of MD Rt. 90 and Isle of Wight Rd., Isle of Wight. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 420 ft; casing diameter 4 in., to 410 ft; screen diameter 2 in., from 410 to 420 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval from July 1985 to current year.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 3.87 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

PERIOD OF RECORD.--September 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.54 ft below land surface, February 24, 1998 (recorder); lowest measured, 15.06 ft below land surface, August 16, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

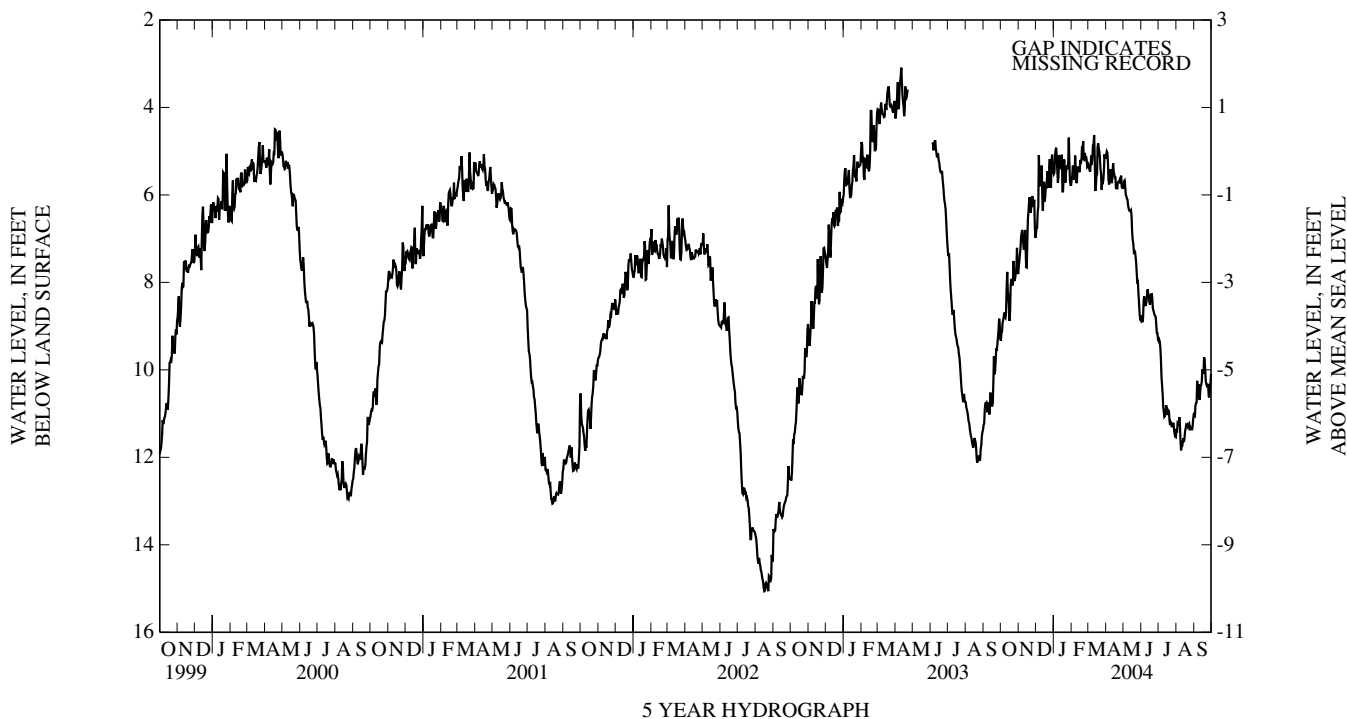
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	7.52	JAN 29, 2004	5.41	APR 14, 2004	5.05	JUL 23, 2004	11.17
NOV 25	5.41	FEB 25	5.05	MAY 12	6.10	AUG 18	11.16
JAN 06, 2004	4.48	MAR 24	5.59	JUN 23	8.59	SEP 16	9.81
HIGHEST 4.48		JAN 06, 2004					
LOWEST 11.17		JUL 23, 2004					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	9.33	8.67	7.65	7.05	6.88	6.28	5.52	5.21	5.65	5.19	5.31	4.87
2	9.15	8.53	7.53	6.94	6.74	6.32	5.49	4.85	5.56	4.98	5.37	4.78
3	9.13	8.47	7.36	6.87	6.74	6.15	5.10	4.53	5.33	4.59	5.43	5.03
4	8.92	8.36	7.24	6.72	6.39	5.89	4.98	4.48	5.39	4.73	5.47	4.92
5	8.86	8.39	6.98	6.43	6.27	4.88	4.92	4.25	5.62	5.15	5.31	4.70
6	8.79	8.22	6.88	6.40	5.09	4.43	5.11	4.35	5.65	4.82	5.10	4.58
7	8.69	8.17	6.80	6.32	5.57	4.84	5.43	4.99	5.10	4.55	5.31	4.74
8	8.79	8.35	6.93	6.46	5.80	5.23	5.72	5.32	5.49	4.85	5.13	4.39
9	8.81	8.39	7.13	6.59	5.74	5.15	5.60	4.78	5.73	5.29	4.86	4.38
10	8.69	7.88	7.25	6.73	5.76	4.96	5.09	4.50	5.70	5.01	4.84	4.29
11	8.13	7.39	7.07	6.40	5.33	4.32	5.13	4.61	5.37	4.92	4.63	4.15
12	7.76	7.21	6.80	6.16	6.07	5.33	5.41	4.87	5.37	4.93	5.11	4.03
13	8.20	7.50	7.25	6.23	6.36	5.76	5.31	4.77	5.40	4.82	5.91	4.79
14	8.33	7.56	7.65	7.25	5.89	4.62	5.24	4.88	5.46	4.90	5.82	5.38
15	8.52	7.54	7.66	7.04	5.70	4.69	5.08	4.60	5.46	4.83	5.56	4.98
16	8.88	8.49	7.04	6.32	6.15	5.68	5.92	4.93	5.20	4.51	5.54	4.58
17	8.68	8.03	6.53	5.99	6.04	5.09	5.92	5.19	5.28	4.73	4.91	4.25
18	8.07	7.41	6.37	5.78	5.81	5.10	5.50	4.72	5.20	4.45	4.82	4.27
19	7.94	7.52	6.15	5.42	5.82	5.33	5.19	4.35	4.89	4.23	4.93	4.33
20	7.94	7.46	6.05	5.57	5.64	4.94	5.48	4.86	4.95	4.27	5.00	4.49
21	8.07	7.67	6.27	5.76	5.46	4.87	5.72	5.13	4.77	4.24	5.14	4.56
22	8.01	7.13	6.41	5.72	5.74	5.27	5.50	4.73	5.19	4.48	5.40	4.78
23	7.51	6.99	6.19	5.49	5.83	5.07	5.37	4.81	5.20	4.64	5.52	5.02
24	7.82	7.22	6.06	5.27	5.38	4.41	5.33	4.75	5.04	4.61	5.88	5.18
25	7.97	7.40	6.03	5.37	5.18	4.52	5.41	4.95	5.17	4.63	5.73	5.36
26	7.88	7.30	6.24	5.54	5.62	5.04	5.26	4.56	5.12	4.73	5.73	5.30
27	7.79	7.02	6.23	5.55	5.84	5.19	4.69	4.19	5.20	4.70	5.66	5.26
28	7.65	6.91	6.11	5.35	5.23	4.60	5.26	4.29	5.36	4.81	5.43	4.97
29	7.21	6.52	6.74	5.62	5.08	4.69	5.68	4.98	5.34	4.97	5.07	4.52
30	7.66	7.10	6.98	6.65	5.37	4.74	5.77	5.31	---	---	5.15	4.63
31	7.81	7.16	---	---	5.46	5.09	5.77	5.38	---	---	5.15	4.73
MONTH	9.33	6.52	7.66	5.27	6.88	4.32	5.92	4.19	5.73	4.23	5.91	4.03

WORCESTER COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.09	4.48	5.84	5.34	8.75	8.08	9.34	8.64	11.35	10.79	11.05	10.54
2	5.01	4.54	5.69	5.07	8.86	8.14	9.31	8.60	11.43	10.79	11.06	10.54
3	5.04	4.55	5.67	5.12	8.91	8.18	9.36	8.62	11.22	10.79	10.81	10.33
4	5.27	4.67	5.81	5.30	8.81	7.96	9.49	8.67	11.24	10.72	10.76	10.35
5	5.66	5.13	6.00	5.34	8.42	7.74	9.76	8.90	11.22	10.78	10.75	9.99
6	5.76	5.20	6.03	5.34	8.32	7.67	10.15	9.30	11.08	10.66	10.25	9.80
7	5.62	4.92	6.09	5.37	8.46	7.66	10.35	9.74	11.25	10.82	10.50	10.05
8	5.41	4.84	6.11	5.49	8.54	7.95	10.55	9.98	11.61	11.12	10.64	10.05
9	5.49	4.75	6.24	5.49	8.49	8.07	10.84	10.30	11.84	11.32	10.33	9.93
10	5.71	4.96	6.31	5.72	8.44	7.98	10.96	10.57	11.74	11.22	10.69	10.21
11	5.71	5.12	6.36	5.78	8.27	7.60	11.07	10.61	11.74	11.22	10.56	9.97
12	5.51	5.08	6.37	5.92	8.16	7.71	11.05	10.54	11.65	11.07	10.37	9.80
13	5.28	4.63	6.37	5.97	8.26	7.75	10.98	10.37	11.56	11.06	10.35	9.88
14	5.46	4.83	6.35	5.87	8.29	7.83	10.81	10.23	11.65	10.95	10.26	9.61
15	5.53	5.11	6.48	6.07	8.45	7.93	10.86	10.30	11.55	11.01	9.99	9.47
16	5.60	5.18	6.84	6.39	8.51	7.92	10.99	10.39	11.40	10.85	10.06	9.52
17	5.60	5.22	7.03	6.51	8.38	7.79	11.03	10.45	11.34	10.84	10.09	9.40
18	5.86	5.35	7.11	6.61	8.31	7.73	10.93	10.27	11.25	10.83	9.71	9.17
19	5.75	5.32	7.30	6.71	8.25	7.71	10.95	10.27	11.26	10.83	9.78	9.22
20	5.87	5.34	7.28	6.74	8.36	7.71	11.17	10.48	11.29	10.87	10.02	9.50
21	5.72	5.07	7.29	6.74	8.60	7.91	11.26	10.72	11.24	10.83	10.27	9.71
22	5.70	5.06	7.41	6.80	8.64	8.14	11.19	10.81	11.25	10.69	10.33	9.71
23	5.70	5.21	7.54	6.93	8.70	8.18	11.21	10.77	11.23	10.72	10.37	9.76
24	5.71	5.15	7.79	7.10	8.75	8.24	11.31	10.89	11.38	10.80	10.36	9.69
25	5.62	5.26	7.99	7.38	8.76	8.33	11.24	10.72	11.31	10.73	10.32	9.81
26	5.60	5.08	7.98	7.44	8.80	8.35	11.23	10.69	11.33	10.71	10.60	10.11
27	5.56	5.06	8.26	7.58	8.98	8.54	11.23	10.67	11.33	10.73	10.63	10.07
28	5.82	5.23	8.48	7.85	9.16	8.57	11.39	10.66	11.38	10.76	10.49	9.83
29	5.84	5.47	8.71	8.16	9.16	8.56	11.48	10.84	11.30	10.72	10.33	9.58
30	5.84	5.48	8.85	8.40	9.31	8.65	11.53	10.83	11.13	10.43	10.10	9.58
31	---	---	8.87	8.19	---	---	11.54	10.87	11.03	10.43	---	---
MONTH	5.87	4.48	8.87	5.07	9.31	7.60	11.54	8.60	11.84	10.43	11.06	9.17
YEAR	11.84	4.03										

Daily Low Water Levels



WORCESTER COUNTY—Continued

WELL NUMBER.--WO Bg 49. SITE ID.--382038075065901. PERMIT NUMBER.--WO-73-0520.

LOCATION.--Lat 38°20'38", long 75°06'59", Hydrologic Unit 020060010, near Keyser Point Rd., West Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 243 ft; casing diameter 4 in., to 233 ft; screen diameter 2 in., from 233 to 243 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, May 1985 to current year. Periodic water level measurements with chalked steel tape October 1975 to May 1985.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.13 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.42 ft below land surface, March 12, 1993 (recorder); lowest measured, 31.69 ft below land surface, August 21, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

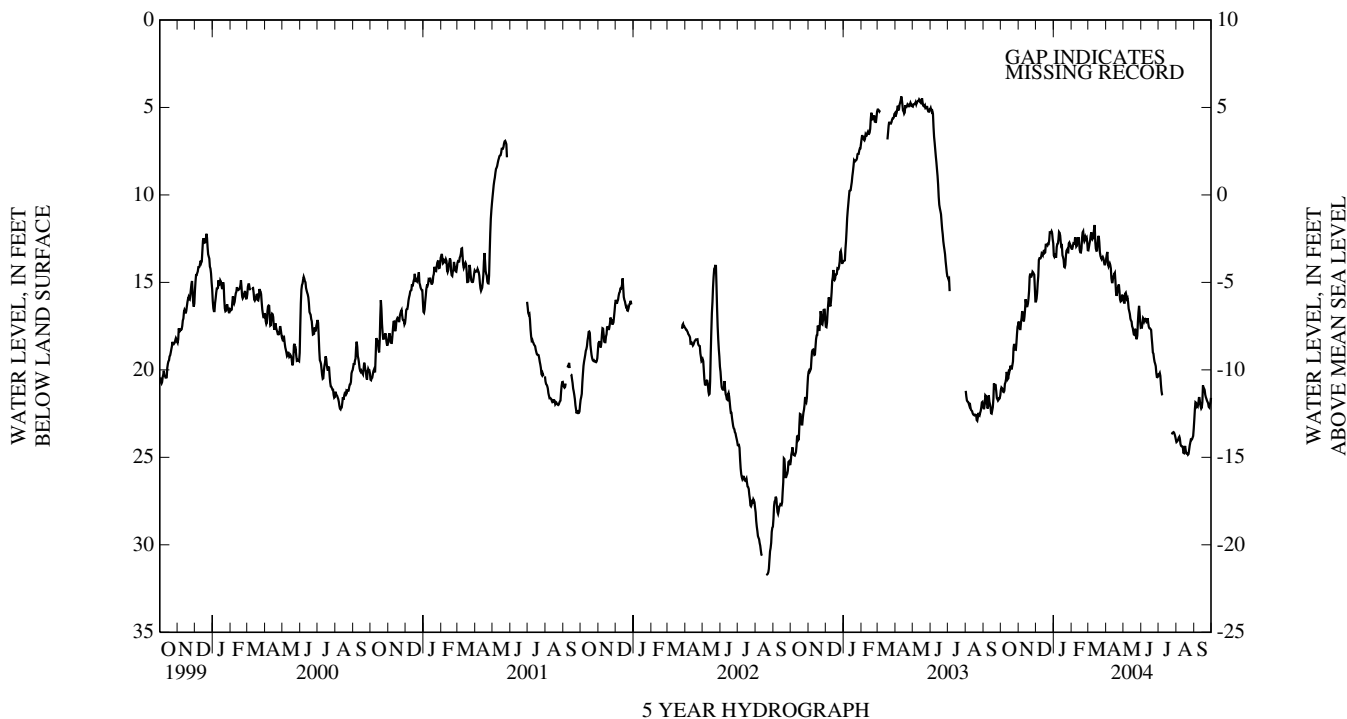
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	17.26	JAN 29, 2004	12.77	APR 16, 2004	14.27	JUL 23, 2004	23.59
NOV 25	14.30	FEB 25	12.27	MAY 12	16.66	AUG 18	24.72
JAN 06, 2004	12.74	MAR 26	13.52	JUN 23	19.21	SEP 16	20.69
HIGHEST	12.27	FEB 25, 2004					
LOWEST	24.72	AUG 18, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.15	20.97	17.24	17.11	16.09	15.92	13.46	12.77	13.08	13.00	13.17	12.98
2	21.01	20.81	17.58	17.24	15.93	15.60	13.54	13.46	13.08	12.94	12.98	12.73
3	21.05	20.94	17.67	17.58	15.60	15.03	13.47	13.33	12.94	12.50	12.77	12.60
4	21.08	20.93	17.67	17.27	15.03	14.64	13.54	13.44	12.77	12.51	12.60	12.33
5	21.25	21.08	17.27	17.01	14.64	13.71	13.54	12.99	12.79	12.69	12.33	12.14
6	21.27	21.18	17.03	16.61	13.71	13.28	12.99	12.72	12.76	12.42	12.14	11.98
7	21.20	20.76	16.64	16.47	13.62	13.28	12.81	12.72	12.42	12.27	12.44	12.06
8	20.80	20.68	16.83	16.53	13.63	13.52	12.78	12.55	12.68	12.33	12.53	12.43
9	20.71	20.52	17.11	16.82	13.62	13.52	12.55	12.07	12.95	12.68	12.47	12.24
10	20.52	20.11	17.23	16.97	13.52	13.33	12.12	11.94	12.90	12.52	12.24	11.91
11	20.12	20.03	16.97	16.56	13.33	12.91	12.17	11.85	12.52	12.35	11.91	11.62
12	20.22	20.06	16.56	15.96	13.36	13.05	12.32	11.84	12.54	12.42	11.72	11.56
13	20.53	20.22	15.96	15.80	13.43	13.25	12.70	12.32	12.42	12.22	12.68	11.72
14	20.48	19.98	16.25	15.94	13.25	12.63	12.94	12.70	12.77	12.21	13.07	12.68
15	19.99	19.88	16.36	16.25	13.15	12.57	12.91	12.74	13.16	12.77	13.19	13.00
16	20.08	19.91	16.36	16.15	13.32	13.15	13.45	12.91	13.28	13.11	13.18	12.72
17	19.91	19.74	16.21	15.91	13.29	12.81	13.56	13.45	13.29	13.06	12.78	12.43
18	19.76	19.68	15.91	15.49	12.85	12.73	13.71	13.51	13.06	12.48	12.43	12.32
19	19.93	19.68	15.49	14.68	12.85	12.75	14.11	13.71	12.48	12.13	12.34	12.23
20	19.93	19.73	14.68	14.41	12.83	12.59	14.14	14.00	12.14	11.91	12.71	12.31
21	19.73	19.51	14.50	14.30	12.88	12.71	14.00	13.47	12.08	11.87	13.27	12.71
22	19.52	18.75	14.66	14.42	12.79	12.71	13.47	13.01	12.53	12.08	13.49	13.27
23	18.76	18.39	14.67	14.58	12.80	12.57	13.19	13.05	12.66	12.53	13.59	13.44
24	18.52	18.34	14.58	14.36	12.57	12.13	13.13	12.95	12.59	12.40	13.67	13.57
25	18.63	18.46	14.39	14.27	12.14	12.05	13.27	13.07	12.40	12.26	13.59	13.45
26	18.84	18.63	14.43	14.27	12.15	12.09	13.28	12.77	12.48	12.35	13.54	13.43
27	18.85	18.44	14.50	14.36	12.16	12.08	12.77	12.36	12.43	12.17	13.62	13.42
28	18.48	17.95	14.56	14.46	12.08	11.95	12.72	12.35	12.69	12.12	13.83	13.61
29	17.95	17.42	15.31	14.54	12.18	12.05	12.82	12.70	13.16	12.69	13.97	13.83
30	17.54	17.42	16.09	15.31	12.53	12.12	12.87	12.71	---	---	13.97	13.82
31	17.42	17.23	---	---	12.77	12.53	13.02	12.87	---	---	13.82	13.62
MONTH	21.27	17.23	17.67	14.27	16.09	11.95	14.14	11.84	13.29	11.87	13.97	11.56

WORCESTER COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.62	13.36	16.03	15.84	17.57	17.46	20.25	20.10	24.13	23.95	22.84	22.25
2	13.39	13.15	16.16	16.03	17.58	17.31	20.25	20.05	24.10	24.03	22.25	21.85
3	13.26	13.01	16.16	15.59	17.31	17.03	20.18	20.05	24.05	23.97	21.85	21.52
4	13.96	13.26	15.64	15.57	17.03	16.93	20.34	20.11	23.98	23.82	21.88	21.62
5	14.08	13.95	15.59	15.46	17.08	16.94	20.83	20.31	23.87	23.72	22.08	21.88
6	13.97	13.88	15.75	15.46	17.22	17.03	21.20	20.80	23.82	23.70	22.02	21.84
7	13.90	13.80	15.94	15.69	17.13	17.04	21.41	21.17	23.95	23.81	22.08	21.91
8	14.00	13.86	15.89	15.73	17.10	16.98	21.44	21.28	24.24	23.95	21.91	21.56
9	14.20	13.93	16.12	15.74	17.16	16.93	---	---	24.34	24.24	21.61	21.31
10	14.76	14.20	16.51	16.12	17.26	17.09	---	---	24.37	24.32	21.61	21.36
11	14.99	14.76	16.65	16.45	17.22	17.03	---	---	24.37	24.32	21.87	21.53
12	14.99	14.66	16.80	16.62	17.05	16.96	---	---	24.39	24.35	22.09	21.77
13	14.70	14.55	17.07	16.77	17.34	17.03	---	---	24.74	24.39	22.21	22.05
14	14.61	14.41	17.18	17.02	17.54	17.34	---	---	24.76	24.46	22.15	21.84
15	14.51	14.45	17.23	17.03	17.62	17.54	---	---	24.50	24.35	21.84	20.89
16	14.45	14.25	17.51	17.23	17.63	17.50	---	---	24.35	24.15	20.89	20.59
17	14.93	14.34	17.60	17.50	17.67	17.58	---	---	24.58	24.28	21.00	20.59
18	15.56	14.93	17.80	17.60	17.72	17.60	---	---	24.77	24.57	21.07	20.95
19	15.77	15.56	17.98	17.80	18.16	17.72	---	---	24.78	24.77	21.15	20.95
20	15.61	15.37	18.00	17.65	18.55	18.13	---	---	24.77	24.71	21.42	21.13
21	15.37	15.20	17.65	17.47	19.01	18.50	---	---	24.85	24.70	21.56	21.40
22	15.20	15.08	17.76	17.53	19.07	18.92	---	---	24.81	24.57	21.65	21.50
23	15.12	15.05	18.15	17.75	19.35	19.00	---	---	24.57	24.26	21.76	21.50
24	15.49	15.07	18.25	18.03	19.54	19.26	23.69	23.55	24.33	24.12	21.83	21.66
25	15.97	15.49	18.03	17.28	19.65	19.45	23.60	23.35	24.16	23.97	21.91	21.75
26	16.09	15.94	17.28	16.72	19.79	19.59	23.58	23.41	23.99	23.81	22.11	21.91
27	16.06	15.84	16.72	16.34	20.17	19.79	23.56	23.40	24.01	23.88	22.15	22.00
28	15.86	15.70	16.34	16.14	20.41	20.17	23.60	23.39	23.97	23.84	22.00	21.78
29	15.70	15.66	16.70	16.24	20.42	20.32	23.70	23.43	23.88	23.76	21.87	21.60
30	15.84	15.65	17.28	16.70	20.38	20.24	23.82	23.61	23.78	23.37	21.60	21.26
31	---	---	17.59	17.28	---	---	23.99	23.73	23.37	22.84	---	---
MONTH	16.09	13.01	18.25	15.46	20.42	16.93	23.99	20.05	24.85	22.84	22.84	20.59
YEAR	24.85	11.56										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 31. SITE ID.--382215075041801. PERMIT NUMBER.--WO-04-9586.

LOCATION.--Lat 38°22'15", long 75°04'18", Hydrologic Unit 020060010, at 44th St, Ocean City. Owner: Town of Ocean City.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 278 ft; casing diameter 4 in., to 263 ft; screen diameter 3 in., from 263 to 278 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Periodic water level measurements with chalked steel tape September 1970 to May 1985. Equipped with digital water-level recorder--60-minute recording interval, May 1985 to September 2002.

DATUM.--Elevation of land surface is 5.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.49 ft above land surface.

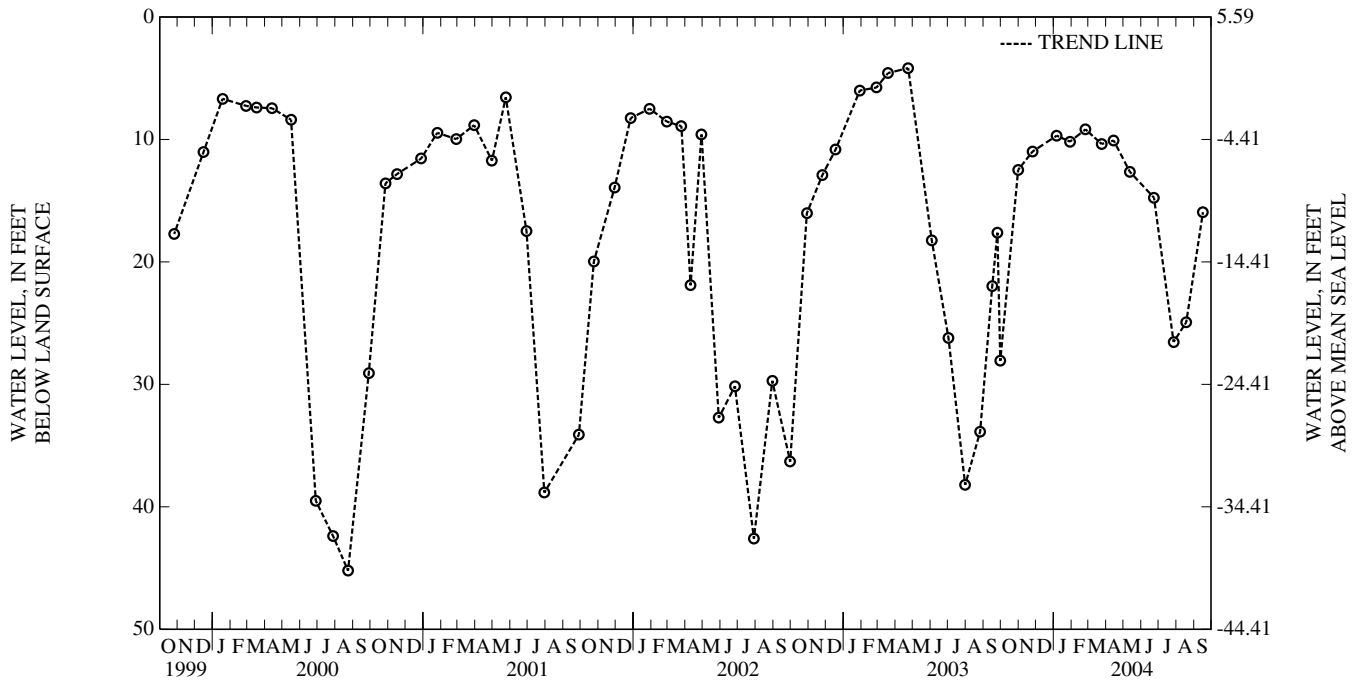
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD.--September 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.55 ft below land surface, March 13, 1993 (recorder); lowest measured, 51.44 ft below land surface, August 16, 1998 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	12.48	JAN 29, 2004	10.18	APR 14, 2004	10.09	JUL 27, 2004	26.54
NOV 25	10.99	FEB 25	9.18	MAY 12	12.64	AUG 18	24.93
JAN 06, 2004	9.69	MAR 24	10.37	JUN 23	14.76	SEP 16	15.94
HIGHEST 9.18 FEB 25, 2004							
LOWEST 26.54 JUL 27, 2004							



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 34. SITE ID.--382443075033501. PERMIT NUMBER.--WO-04-9588.

LOCATION.--Lat 38°24'43", long 75°03'35", Hydrologic Unit 02060010, north side of 100th St., 0.2 mi west of MD Rt. 528, Ocean City. Owner: Town of Ocean City.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 353 ft; casing diameter 4 in., to 316.2 ft, casing diameter 2.5 in., from 316.2 to 337 ft; screen diameter 3 in., from 337 to 353 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval April 1985 to current year. Prior to April 1985, periodic water level measurements with chalked steel tape were collected.

DATUM.--Elevation of land surface is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.86 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.54 ft above land surface, March 27, 1973; lowest measured, 19.04 ft below land surface, September 5, 1995 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

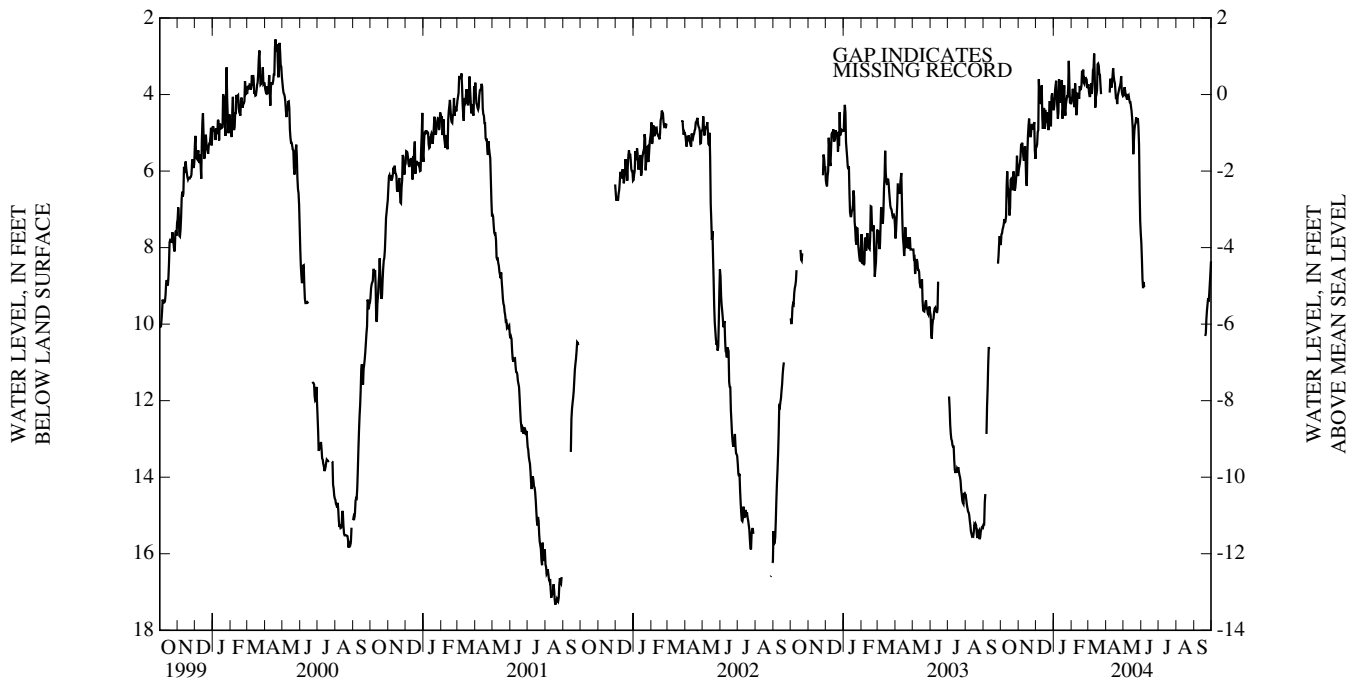
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	5.37	JAN 29, 2004	3.79	APR 14, 2004	3.24	JUL 23, 2004	15.19
NOV 25	3.82	FEB 25	3.24	MAY 12	4.00	AUG 18	14.92
JAN 06, 2004	3.20	MAR 24	3.73	JUN 23	11.69	SEP 16	12.82
HIGHEST	3.20	JAN 06, 2004					
LOWEST	15.19	JUL 23, 2004					

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.90	6.79	5.98	5.03	5.39	4.68	4.41	3.84	4.10	3.46	3.73	3.10
2	7.65	6.63	5.88	4.98	5.37	4.65	4.27	3.44	4.06	3.22	3.93	2.99
3	7.63	6.70	5.79	4.93	5.30	4.49	3.91	3.03	3.85	2.82	4.04	3.19
4	7.52	6.66	5.66	4.77	4.98	4.22	3.77	2.94	4.12	2.88	4.04	3.11
5	7.47	6.64	5.35	4.50	4.93	3.06	3.64	2.60	4.25	3.29	3.88	2.86
6	7.39	6.40	5.37	4.50	3.60	2.44	4.01	2.67	4.33	3.04	3.71	2.67
7	7.26	6.28	5.26	4.36	4.09	2.84	4.33	3.28	3.71	2.59	3.98	2.84
8	7.36	6.44	5.41	4.53	4.23	3.24	4.63	3.69	4.10	3.09	3.74	2.34
9	7.31	6.45	5.62	4.64	4.16	3.19	4.46	3.24	4.54	3.64	3.36	2.35
10	7.18	5.86	5.73	4.94	4.25	3.19	3.60	2.84	4.43	3.09	3.31	2.26
11	6.41	5.34	5.61	4.58	3.76	2.45	3.77	2.94	3.98	3.09	2.93	2.26
12	6.01	5.12	5.35	4.36	4.62	3.64	4.21	3.36	3.99	3.15	3.44	2.26
13	6.41	5.57	5.72	4.43	4.90	3.92	3.95	3.06	4.02	3.04	4.34	2.73
14	6.50	5.45	6.27	5.72	4.49	2.93	3.85	3.11	4.11	3.14	4.07	3.40
15	6.75	5.51	6.39	5.39	4.35	3.04	3.62	2.83	3.78	3.06	4.00	3.02
16	7.16	6.50	5.57	4.72	4.90	4.12	4.63	3.16	3.86	2.59	3.89	2.59
17	6.96	6.09	5.08	4.37	4.40	3.46	4.38	3.56	3.86	2.86	3.21	2.27
18	6.23	5.48	4.82	4.08	4.74	3.47	4.17	2.96	3.76	2.45	3.19	2.27
19	6.20	5.56	4.63	3.70	4.63	3.74	3.76	2.48	3.38	2.27	3.24	2.27
20	6.23	5.49	4.85	3.77	4.47	3.24	4.39	3.08	3.52	2.27	3.46	2.43
21	6.50	5.76	5.09	3.93	4.76	3.19	4.55	3.26	3.35	2.27	3.48	2.54
22	6.38	5.00	5.09	3.78	4.86	3.73	4.25	2.83	3.69	2.71	3.75	2.86
23	6.01	4.89	4.89	3.51	4.93	3.39	4.15	2.83	3.72	2.71	3.99	3.18
24	6.36	5.16	4.77	3.26	4.44	2.71	4.05	2.83	3.58	2.72	---	---
25	6.51	5.38	4.81	3.32	4.17	2.80	4.05	3.11	3.60	2.74	---	---
26	6.45	5.17	4.92	3.57	4.66	3.49	3.81	2.56	3.58	2.90	---	---
27	6.28	4.84	4.85	3.60	4.83	3.55	3.12	2.34	3.61	2.93	---	---
28	6.05	4.70	4.72	3.49	4.05	3.05	3.71	2.39	3.83	3.06	---	---
29	5.60	4.33	5.46	3.90	3.97	3.23	4.21	3.18	3.79	3.23	---	---
30	6.06	5.06	5.68	5.04	4.22	3.32	4.23	3.56	---	---	---	---
31	6.13	5.10	---	---	4.37	3.65	4.23	3.71	---	---	---	---
MONTH	7.90	4.33	6.39	3.26	5.39	2.44	4.63	2.34	4.54	2.27	4.34	2.26

WORCESTER COUNTY--Continued

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	4.02	3.13	7.88	6.69	---	---	---	---	---	---
2	---	---	3.88	2.76	8.30	7.03	---	---	---	---	---	---
3	---	---	3.81	2.60	8.83	7.49	---	---	---	---	---	---
4	---	---	3.91	2.76	9.06	7.58	---	---	---	---	---	---
5	---	---	4.03	2.68	8.90	7.56	---	---	---	---	---	---
6	---	---	4.02	2.69	9.03	7.60	---	---	---	---	---	---
7	3.95	2.51	4.13	2.88	---	---	---	---	---	---	---	---
8	3.61	2.33	4.00	2.82	---	---	---	---	---	---	---	---
9	3.61	2.33	4.06	2.82	---	---	---	---	---	---	---	---
10	3.82	2.57	4.03	3.04	---	---	---	---	---	---	---	---
11	3.71	2.82	4.13	3.07	---	---	---	---	---	---	---	---
12	3.52	2.71	4.20	3.30	---	---	---	---	---	---	---	---
13	3.31	2.25	4.20	3.40	---	---	---	---	---	---	---	---
14	3.52	2.54	4.31	3.39	---	---	---	---	---	---	---	---
15	3.64	2.64	4.43	3.53	---	---	---	---	---	---	---	---
16	3.70	2.83	4.61	3.71	---	---	---	---	---	---	---	---
17	3.90	2.92	4.87	3.86	---	---	---	---	---	---	---	---
18	4.12	3.10	5.56	4.41	---	---	---	---	---	---	---	---
19	4.04	3.16	5.24	4.07	---	---	---	---	---	---	---	---
20	4.25	3.17	4.93	3.91	---	---	---	---	---	---	10.31	9.31
21	4.04	2.86	4.80	3.88	---	---	---	---	---	---	10.24	9.15
22	3.97	3.02	4.75	3.85	---	---	---	---	---	---	9.87	8.82
23	3.89	2.91	4.60	3.84	---	---	---	---	---	---	9.64	8.60
24	3.82	2.91	4.67	3.84	---	---	---	---	---	---	9.48	8.30
25	3.77	2.96	4.73	3.96	---	---	---	---	---	---	9.32	8.25
26	3.69	2.94	4.62	3.90	---	---	---	---	---	---	9.41	8.26
27	3.52	2.83	4.86	3.95	---	---	---	---	---	---	9.20	7.99
28	3.91	2.97	5.32	4.16	---	---	---	---	---	---	8.93	7.69
29	4.00	3.30	6.50	4.91	---	---	---	---	---	---	8.67	7.31
30	4.04	3.34	7.31	6.03	---	---	---	---	---	---	8.36	7.34
31	---	---	7.63	6.53	---	---	---	---	---	---	---	---
MONTH	4.25	2.25	7.63	2.60	9.06	6.69	---	---	---	---	10.31	7.31
YEAR	10.31	2.25										

Daily Low Water Levels



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 84. SITE ID.--382215075041901. PERMIT NUMBER.--WO-73-0095.

LOCATION.--Lat 38°22'15", long 75°04'20", Hydrologic Unit 02060010, west end of 44th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 89 ft; casing diameter 4 in., to 84 ft; screen diameter 4 in., from 84 to 89 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.55 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well.

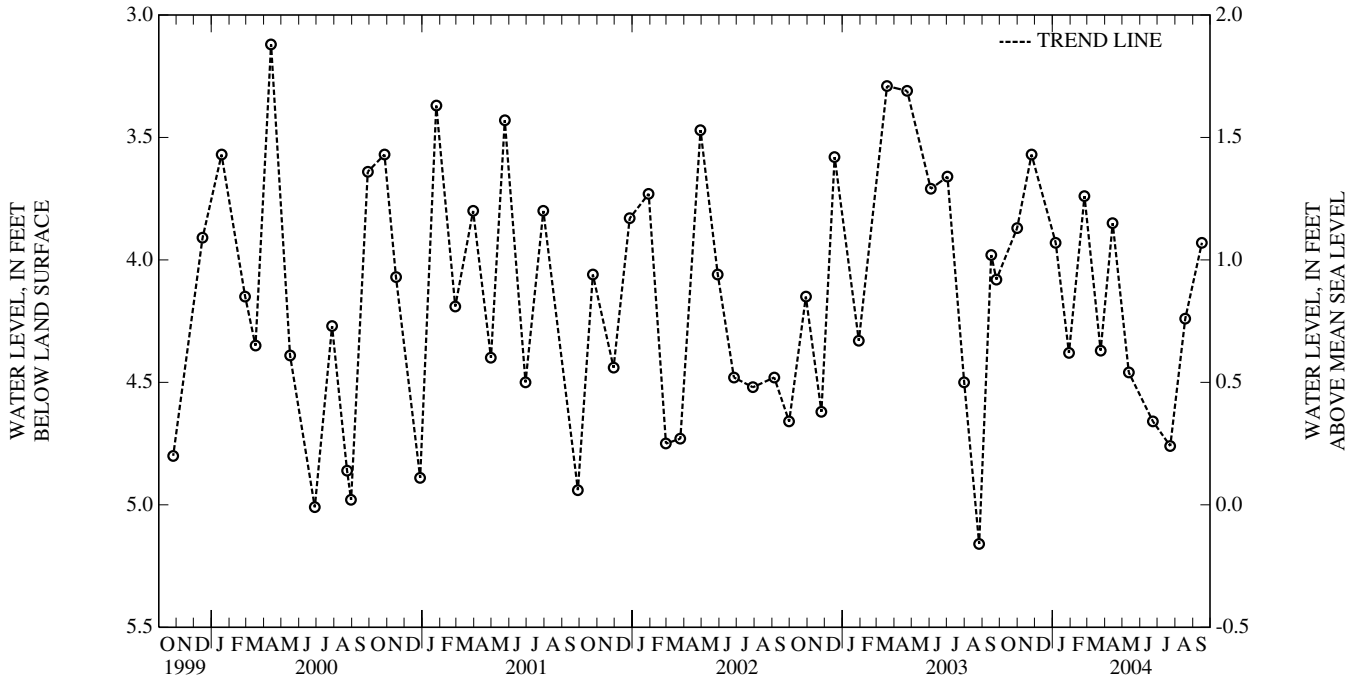
PERIOD OF RECORD.--April 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.55 ft below land surface, January 11, 1993; lowest measured, 6.34 ft below land surface, September 17, 1991.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	3.87	JAN 29, 2004	4.38	APR 14, 2004	3.85	JUL 23, 2004	4.76
NOV 25	3.57	FEB 25	3.74	MAY 12	4.46	AUG 18	4.24
JAN 06, 2004	3.93	MAR 24	4.37	JUN 23	4.66	SEP 16	3.93

HIGHEST 3.57 NOV 25, 2003
 LOWEST 4.76 JUL 23, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 85. SITE ID.--382215075041902. PERMIT NUMBER.--WO-73-0094.

LOCATION.--Lat 38°22'15", long 75°04'19", Hydrologic Unit 02060010, west end of 44th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Pocomoke aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 195 ft; casing diameter 4 in., to 190 ft; screen diameter 4 in., from 190 to 195 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 4 in. casing, 1.78 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

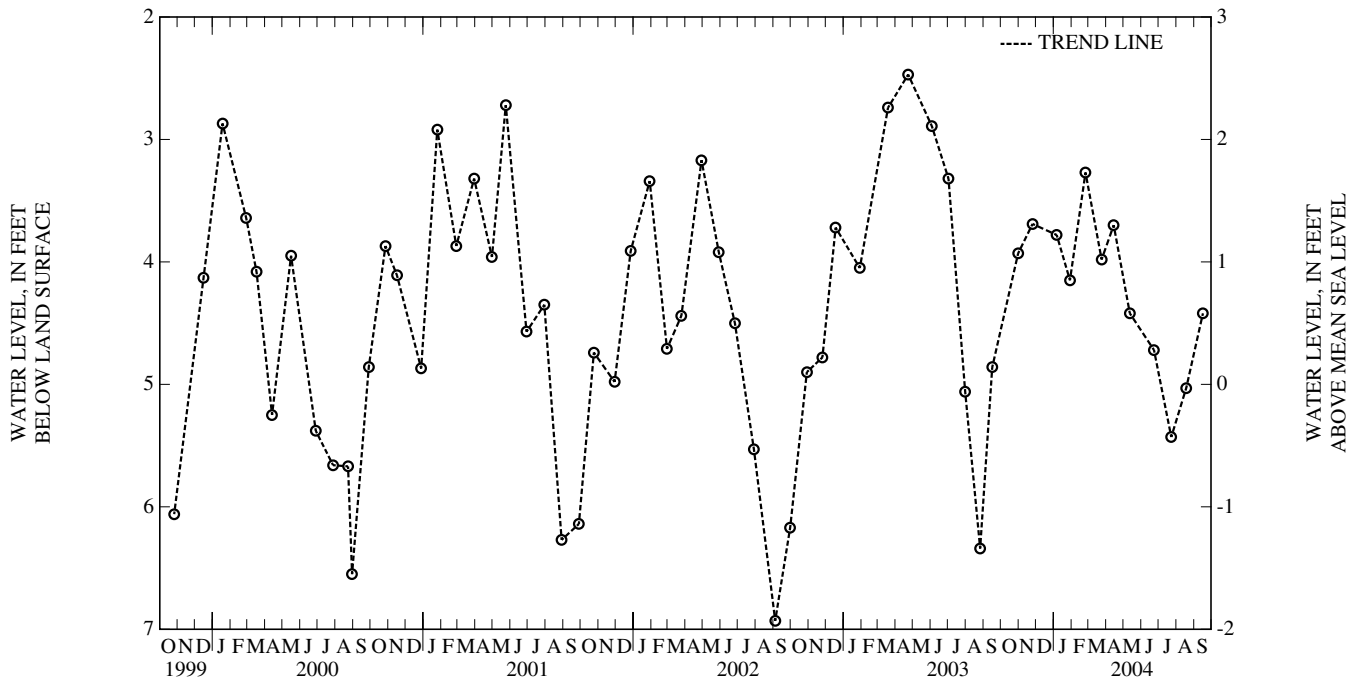
PERIOD OF RECORD.--April 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.43 ft below land surface, January 11, 1993; lowest measured, 7.53 ft below land surface, August 26, 1997.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	3.93	JAN 29, 2004	4.15	APR 14, 2004	3.70	JUL 23, 2004	5.43
NOV 25	3.69	FEB 25	3.27	MAY 12	4.42	AUG 18	5.03
JAN 06, 2004	3.78	MAR 24	3.98	JUN 23	4.72	SEP 16	4.42

HIGHEST 3.27 FEB 25, 2004
 LOWEST 5.43 JUL 23, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 89. SITE ID.--382215075041903 PERMIT NUMBER.--WO-81-1497.

LOCATION.--Lat 38°22'15", long 75°04'19", Hydrologic Unit 020060010, at 44th St, Ocean City. Owner: Town of Ocean City.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 510 ft; casing diameter 4 in., to 388 ft, 408 to 413 ft, 423 to 433 ft, 443 to 464 ft, and 474 to 495 ft; screen diameter 4 in., from 388 to 408 ft, 413 to 423 ft, 433 to 443 ft, 464 to 474 ft, and 495 to 510 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, October 1986 to current year.

DATUM.--Elevation of land surface is 5.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 2.84 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.42 ft below land surface, October 8, 1993 (recorder); lowest recorded, 40.65 ft below land surface, August 17, 1998 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	11.30	JAN 29, 2004	8.94	APR 14, 2004	8.75	JUL 23, 2004	19.96
NOV 25	9.64	FEB 25	8.02	MAY 12	11.26	AUG 18	21.53
JAN 06, 2004	8.38	MAR 24	9.07	JUN 23	13.40	SEP 16	14.82

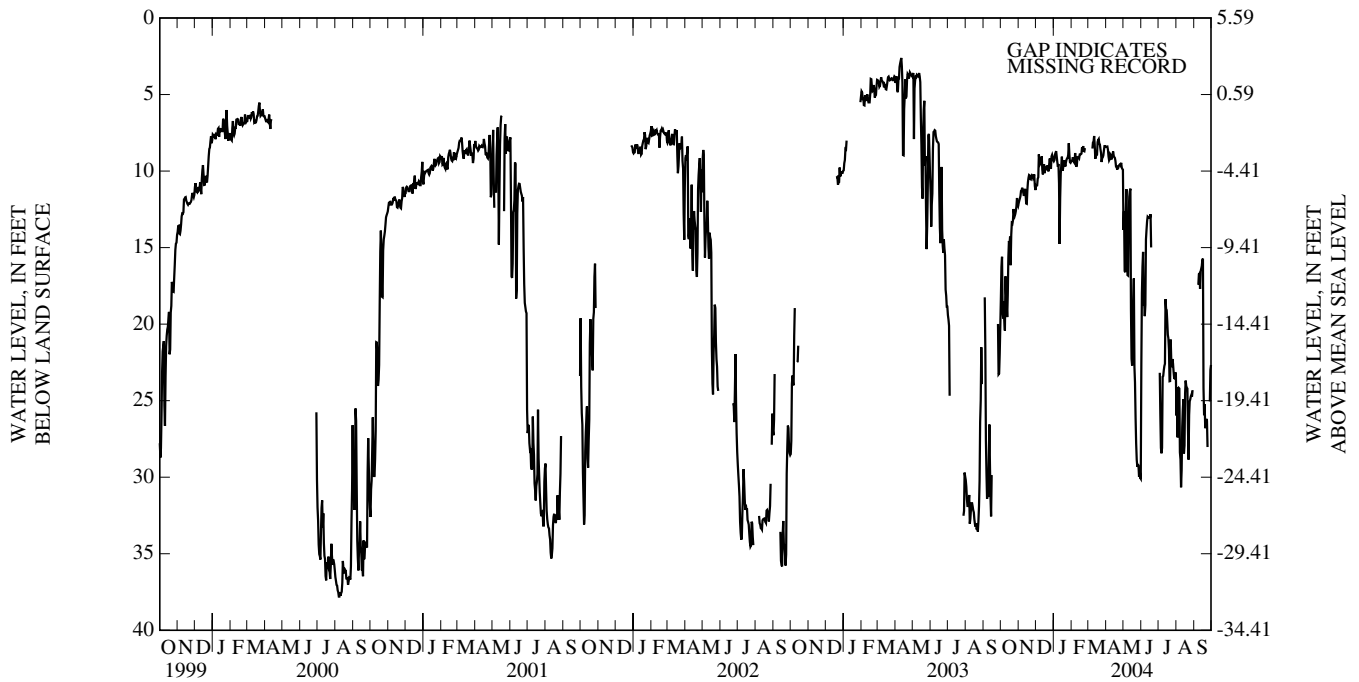
HIGHEST 8.02 FEB 25, 2004
 LOWEST 21.53 AUG 18, 2004

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH										
1	18.36	16.08	12.08	11.12	10.93	10.17	9.36	8.78	9.34	8.63	---	---	---	---	---	---
2	16.25	14.97	11.93	10.98	10.96	10.17	9.29	8.42	9.34	8.42	---	---	---	---	---	---
3	15.60	14.50	11.79	10.94	10.94	10.01	8.92	7.99	9.10	8.02	---	---	---	---	---	---
4	19.21	14.60	11.64	10.75	10.50	9.69	8.80	7.94	9.26	8.07	---	---	---	---	---	---
5	19.63	16.08	11.30	10.43	10.41	8.34	8.70	7.65	9.42	8.46	---	---	---	---	---	---
6	18.54	15.85	11.27	10.38	8.91	7.81	9.04	7.72	9.48	8.20	---	---	---	---	---	---
7	19.69	15.80	11.09	10.23	9.38	8.19	9.40	8.38	8.82	7.74	---	---	---	---	---	---
8	20.42	16.59	11.23	10.35	9.56	8.60	9.72	8.82	9.22	8.24	8.53	7.13	---	---	---	---
9	16.88	15.08	11.43	10.45	9.49	8.56	9.54	8.18	9.72	8.84	8.13	7.16	---	---	---	---
10	18.04	14.45	11.62	10.70	9.57	8.54	10.79	7.78	9.61	8.26	8.07	6.69	---	---	---	---
11	18.67	13.84	11.43	10.40	9.04	7.74	14.76	10.79	9.10	8.25	7.71	6.69	---	---	---	---
12	19.54	14.79	11.16	10.14	9.93	8.94	11.74	9.99	9.08	8.25	8.26	6.74	---	---	---	---
13	18.08	15.20	11.55	10.11	10.22	9.23	10.18	9.07	9.10	8.08	9.20	7.56	---	---	---	---
14	15.64	13.71	12.12	11.38	9.77	8.12	9.61	8.82	9.16	8.17	9.01	8.28	---	---	---	---
15	14.57	13.62	12.14	11.13	9.55	8.22	9.06	8.30	8.91	8.08	8.98	7.95	---	---	---	---
16	14.81	14.04	11.26	10.38	10.14	9.36	9.98	8.56	8.90	7.54	8.93	7.48	---	---	---	---
17	14.28	13.19	10.72	9.97	9.73	8.62	9.84	8.87	8.90	7.93	8.11	7.01	---	---	---	---
18	16.15	13.05	10.44	9.67	9.90	8.64	9.53	8.24	8.86	7.53	7.97	6.92	---	---	---	---
19	14.17	13.01	10.26	9.32	9.89	8.93	9.30	7.65	8.46	7.30	7.91	6.86	---	---	---	---
20	13.41	12.55	10.29	9.32	9.64	8.39	9.51	8.20	8.58	7.28	8.22	7.20	---	---	---	---
21	13.45	12.64	10.51	9.42	9.80	8.31	9.70	8.46	8.37	7.26	8.26	7.32	---	---	---	---
22	13.22	11.72	10.54	9.27	9.94	8.90	9.43	8.02	8.69	7.72	8.58	7.73	---	---	---	---
23	12.48	11.54	10.35	9.07	10.02	8.54	9.26	7.99	8.71	7.67	8.82	7.95	---	---	---	---
24	12.81	11.71	10.26	8.86	9.52	7.84	9.17	7.97	8.50	7.64	9.41	8.20	---	---	---	---
25	12.94	11.74	10.29	8.92	9.18	7.83	9.14	8.22	---	---	9.13	8.33	---	---	---	---
26	12.81	11.59	10.45	9.17	9.64	8.50	8.93	7.66	---	---	9.10	8.32	---	---	---	---
27	12.61	11.21	10.36	9.16	9.86	8.60	8.18	7.40	---	---	8.98	8.33	---	---	---	---
28	12.31	10.99	10.22	9.02	9.04	8.04	8.90	7.47	---	---	8.64	7.82	---	---	---	---
29	11.76	10.53	10.98	9.37	8.94	8.22	9.42	8.37	---	---	8.37	7.51	---	---	---	---
30	12.18	11.24	11.24	10.63	9.10	8.26	9.46	8.76	---	---	8.37	7.74	---	---	---	---
31	12.28	11.24	---	---	9.29	8.53	9.38	8.80	---	---	8.42	7.71	---	---	---	---
MONTH	20.42	10.53	12.14	8.86	10.96	7.74	14.76	7.40	9.72	7.26	9.41	6.69	---	---	---	---

WORCESTER COUNTY--Continued

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	8.41	7.52	13.84	9.10	22.62	17.50	---	---	25.97	21.52	---	---	---	---		
2	8.41	7.57	12.63	9.44	17.99	15.44	---	---	24.15	20.79	---	---	---	---		
3	8.40	7.48	16.53	10.39	16.24	14.34	23.18	14.56	27.40	20.15	---	---	---	---		
4	8.61	7.54	16.61	10.88	15.28	13.37	25.90	20.74	24.30	21.25	---	---	---	---		
5	9.04	8.01	12.89	10.30	18.79	13.43	28.09	23.29	24.17	22.15	---	---	---	---		
6	9.30	8.20	11.18	9.62	18.62	14.34	28.44	23.08	24.21	21.83	---	---	---	---		
7	9.22	7.85	15.48	9.70	19.48	14.04	28.09	22.47	28.38	22.27	---	---	---	---		
8	8.90	7.67	16.80	12.80	18.75	14.18	23.44	20.91	28.84	23.68	17.43	16.42	---	---		
9	8.96	7.66	16.83	12.97	14.46	13.66	23.39	20.54	30.66	24.11	16.73	15.88	---	---		
10	9.24	7.97	12.97	11.47	13.84	13.00	23.01	20.17	29.55	24.38	16.69	15.88	---	---		
11	9.11	8.26	11.68	11.03	13.27	12.26	22.74	19.95	26.71	23.82	17.70	16.01	---	---		
12	8.91	8.08	11.32	10.62	12.98	12.18	22.59	18.11	25.64	22.41	16.55	15.49	---	---		
13	8.72	7.72	11.15	10.40	13.02	12.14	18.37	16.57	24.91	21.68	16.38	15.46	---	---		
14	9.00	8.00	19.12	10.08	13.02	12.17	19.02	15.91	28.45	21.63	16.20	15.03	---	---		
15	9.09	8.13	22.27	14.13	13.06	12.12	19.08	16.39	27.93	21.07	15.80	14.88	---	---		
16	9.14	8.37	22.70	17.13	13.06	12.02	19.81	17.05	24.50	20.98	15.72	14.80	---	---		
17	9.33	8.46	21.18	14.18	12.82	11.80	20.69	17.35	23.69	20.35	24.18	14.99	---	---		
18	9.70	8.77	18.46	14.17	14.99	12.04	20.93	18.00	24.04	21.08	25.95	18.75	---	---		
19	9.72	8.86	17.02	14.32	---	---	21.68	18.66	24.15	21.23	25.24	19.93	---	---		
20	9.90	8.88	22.80	14.53	---	---	23.73	19.54	24.21	21.61	26.80	18.71	---	---		
21	9.74	8.65	23.81	18.06	---	---	23.72	19.33	26.83	21.69	26.50	21.45	---	---		
22	9.77	8.72	26.12	23.76	---	---	21.01	18.32	28.85	23.09	26.19	21.28	---	---		
23	9.65	8.63	27.77	25.89	---	---	22.35	19.17	25.93	23.54	26.31	20.41	---	---		
24	9.59	8.63	28.86	27.33	---	---	22.81	19.93	25.05	22.73	28.03	20.59	---	---		
25	9.56	8.86	29.32	27.89	---	---	22.28	19.52	24.91	22.01	---	---	---	---		
26	9.62	8.80	29.19	27.36	---	---	22.55	19.54	24.72	21.82	---	---	---	---		
27	9.46	8.74	29.23	26.33	---	---	23.11	19.74	24.61	21.32	---	---	---	---		
28	9.78	8.89	29.97	26.06	---	---	23.53	20.28	24.73	21.36	25.05	21.63	---	---		
29	9.86	9.18	29.34	24.60	---	---	23.55	20.28	24.31	20.67	22.99	19.52	---	---		
30	9.91	9.20	30.04	25.61	---	---	23.14	19.79	---	---	22.67	19.54	---	---		
31	---	---	30.10	22.62	---	---	23.31	20.22	---	---	---	---	---	---		
MONTH	9.91	7.48	30.10	9.10	22.62	11.80	28.44	14.56	30.66	20.15	28.03	14.80	---	---		
YEAR	30.66	6.69	---	---	---	---	---	---	---	---	---	---	---	---	---	

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 97. SITE ID.--382127075043803. PERMIT NUMBER.--WO-81-1823.

LOCATION.--Lat 38°21'27", long 75°04'38", Hydrologic Unit 020060010, 28th Street (North well), Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 445 ft; casing diameter 4 in., to 370 ft, from 380 to 390 ft, from 400 to 410 ft, and from 420 to 430 ft; screen diameter 4 in., from 370 to 380 ft, from 390 to 400 ft, from 410 to 420 ft, and from 430 to 440 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.15 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

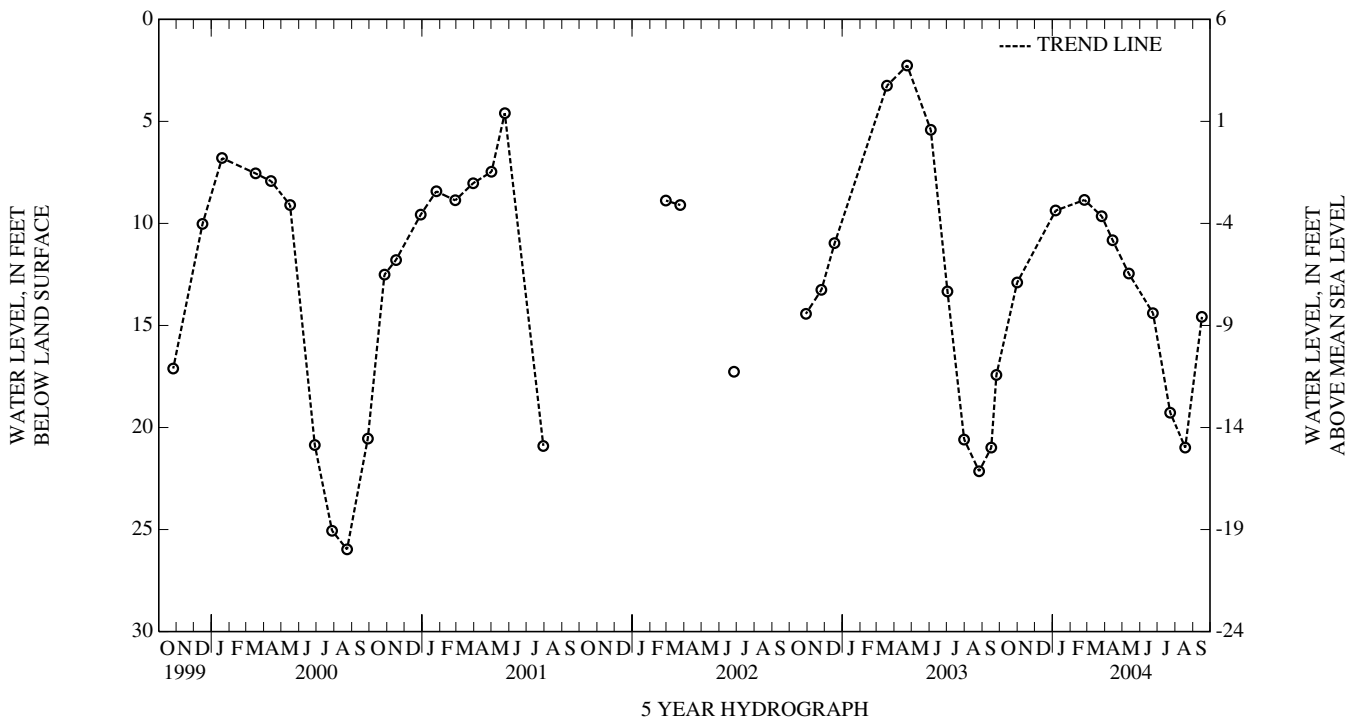
PERIOD OF RECORD.--September 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.26 ft below land surface, April 23, 2003; lowest measured, 25.97 ft below land surface, August 23, 2000.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	12.90	MAR 26, 2004	9.65	JUN 23, 2004	14.40	SEP 16, 2004	14.58
JAN 06, 2004	9.37	APR 14	10.83	JUL 23	19.28		
FEB 25	8.85	MAY 12	12.46	AUG 18	20.98		

HIGHEST 8.85 FEB 25, 2004
 LOWEST 20.98 AUG 18, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 98. SITE ID.--382127075043802. PERMIT NUMBER.--WO-81-1822.

LOCATION.--Lat 38°21'27", long 75°04'38", Hydrologic Unit 02060010, at 28th Street Park, Ocean City. Owner: Town of Ocean City.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 310 ft; casing diameter 4 in., to 255 ft, 275 to 285 ft, and 290 to 305 ft; screen diameter 4 in., from 255 to 275 ft, 285 to 290 ft, and 305 to 310 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder from November 1990 to April 2003.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.52 ft above land surface.

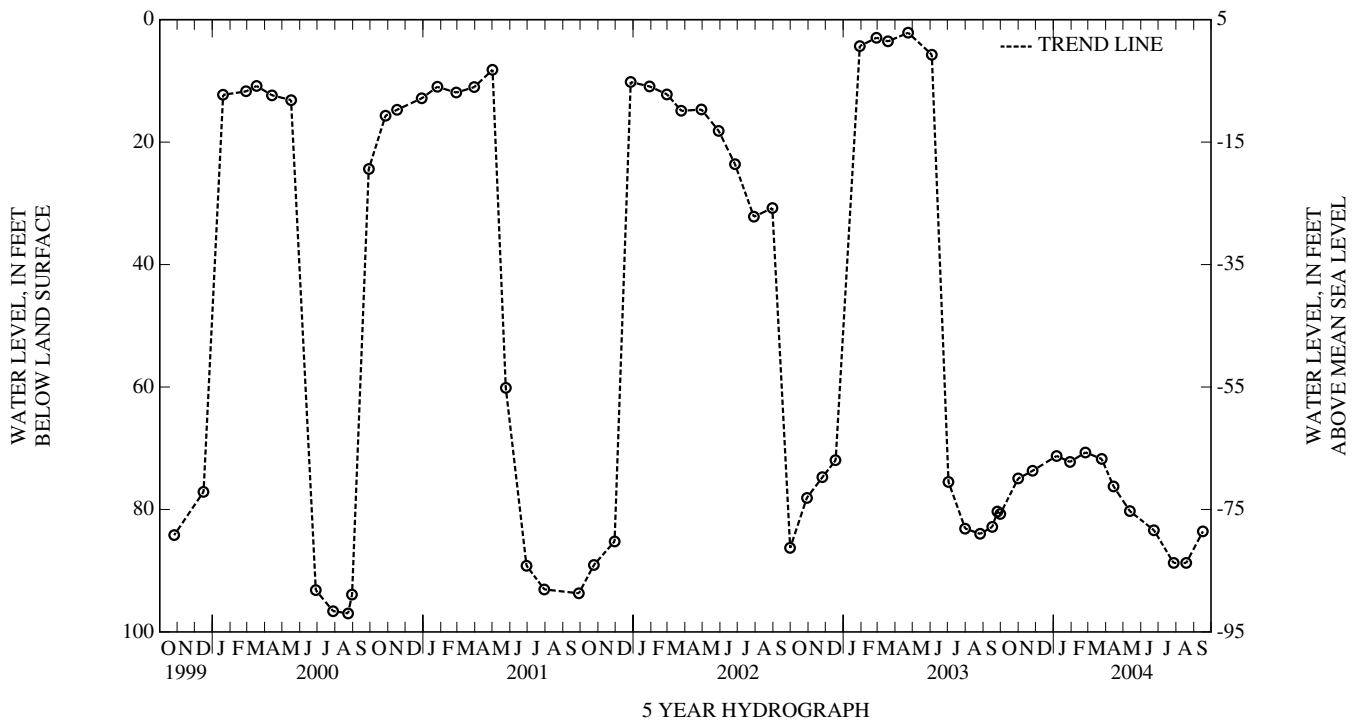
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demand.

PERIOD OF RECORD.--January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.89 ft above land surface, April 2, 1993 (recorder); lowest measured, 100.27 ft below land surface, September 16, 2002 (recorder).

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	74.95	JAN 29, 2004	72.24	APR 14, 2004	76.26	JUL 27, 2004	88.73
NOV 25	73.69	FEB 25	70.68	MAY 12	80.26	AUG 18	88.74
JAN 06, 2004	71.25	MAR 24	71.74	JUN 23	83.40	SEP 16	83.58
HIGHEST 70.68 FEB 25, 2004							
LOWEST 88.74 AUG 18, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Cg 72. SITE ID.--381939075052101. PERMIT NUMBER.--WO-73-1304.

LOCATION.--Lat 38°19'39", long 75°05'21", Hydrologic Unit 02060010, at South Division St., Ocean City. Owner: Town of Ocean City.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 450 ft; casing diameter 4 in., to 384 ft, 394 to 404 ft, and 424 to 445 ft; screen diameter 4 in., from 384 to 394 ft, 404 to 424 ft, and 445 to 450 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

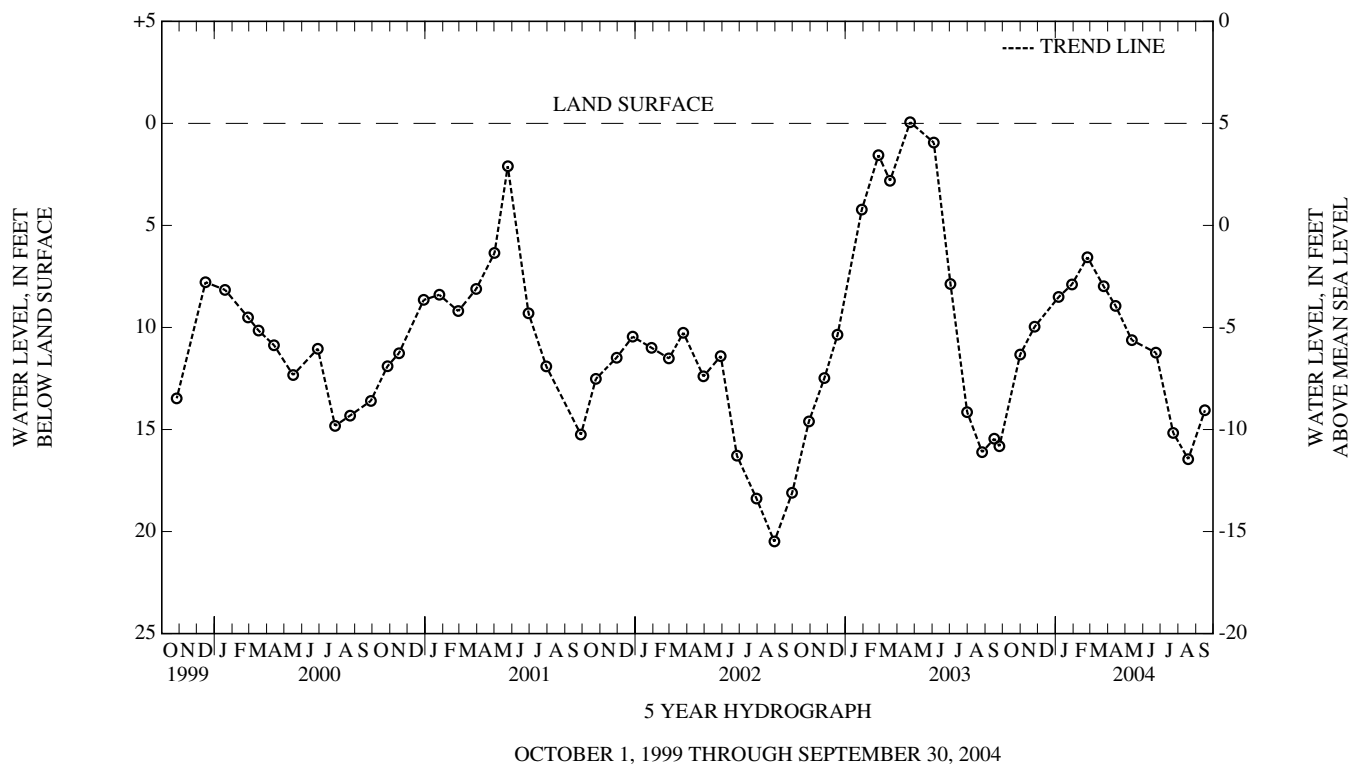
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

PERIOD OF RECORD.--January 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.58 ft above land surface, March 30, 1990; lowest measured, 32.49 ft below land surface, September 25, 1996.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
(READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	11.33	JAN 29, 2004	7.89	APR 14, 2004	8.95	JUL 23, 2004	15.17
NOV 25	9.97	FEB 25	6.56	MAY 12	10.62	AUG 18	16.45
JAN 06, 2004	8.51	MAR 24	7.98	JUN 23	11.24	SEP 16	14.06
HIGHEST 6.56 FEB 25, 2004							
LOWEST 16.45 AUG 18, 2004							



WORCESTER COUNTY--Continued

WELL NUMBER.--WO De 36. SITE ID.--381457075174101. PERMIT NUMBER.--WO-73-0515.

LOCATION.--Lat 38°14'57", long 75°17'41", Hydrologic Unit 02060010, at Newark. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 330 ft; casing diameter 4 in., to 320 ft; screen diameter 2 in., from 320 to 330 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.84 ft above land surface.

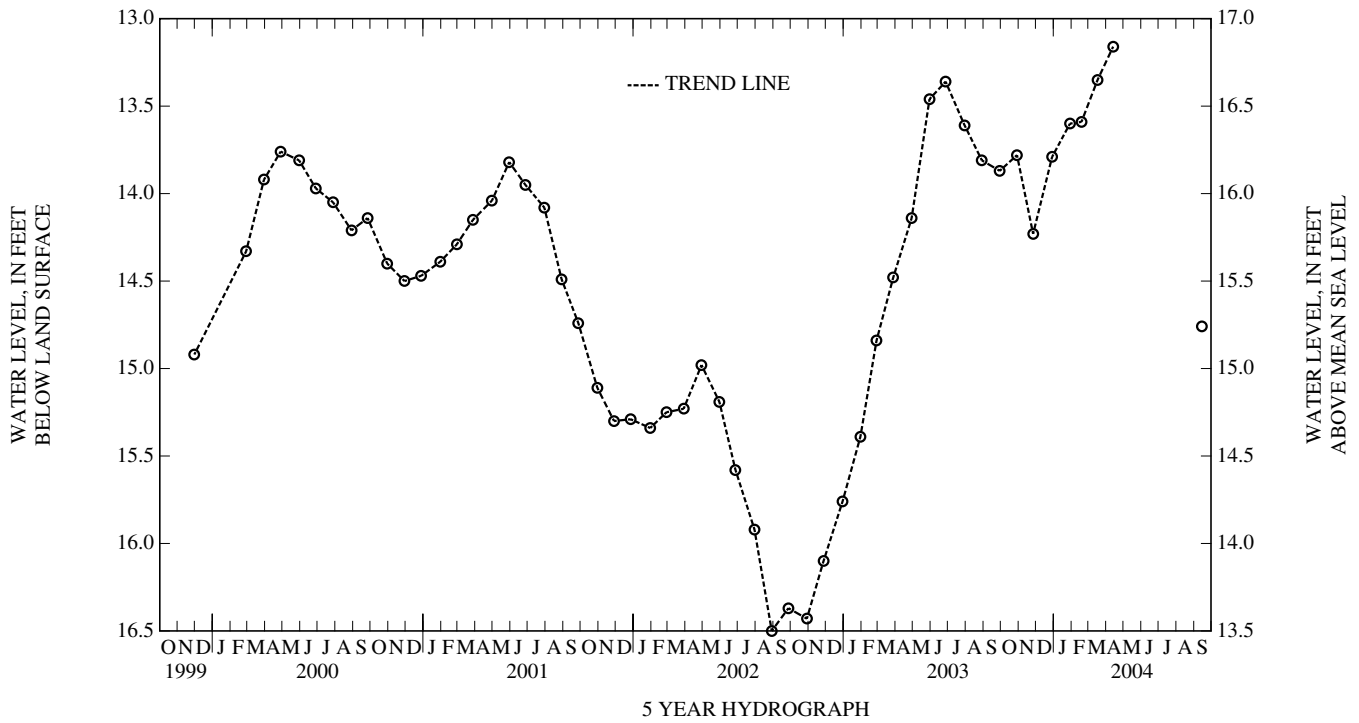
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--September 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.62 ft below land surface, May 20, 1976, lowest measured, 16.50 ft below land surface, August 29, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	13.78	DEC 29, 2003	13.79	FEB 18, 2004	13.59	APR 13, 2004	13.16
NOV 26	14.23	JAN 29, 2004	13.60	MAR 17	13.35	SEP 14	14.76
HIGHEST 13.16 APR 13, 2004							
LOWEST 14.76 SEP 14, 2004							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Dg 21. SITE ID.--381427075081102. PERMIT NUMBER.--WO-73-0519.

LOCATION.--Lat 38°14'26", long 75°08'11", Hydrologic Unit 020060010, at Assateague Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 310 ft; casing diameter 4 in., to 300 ft; screen diameter 2 in., from 300 to 310 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel from November 1990, to current year. Periodic water level measurements with chalked steel tape from October 1975 to April 1985. Equipped with digital water-level recorder--60-minute recording interval from April 1985 to October 1990.

DATUM.--Elevation of land surface is 5.66 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.98 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

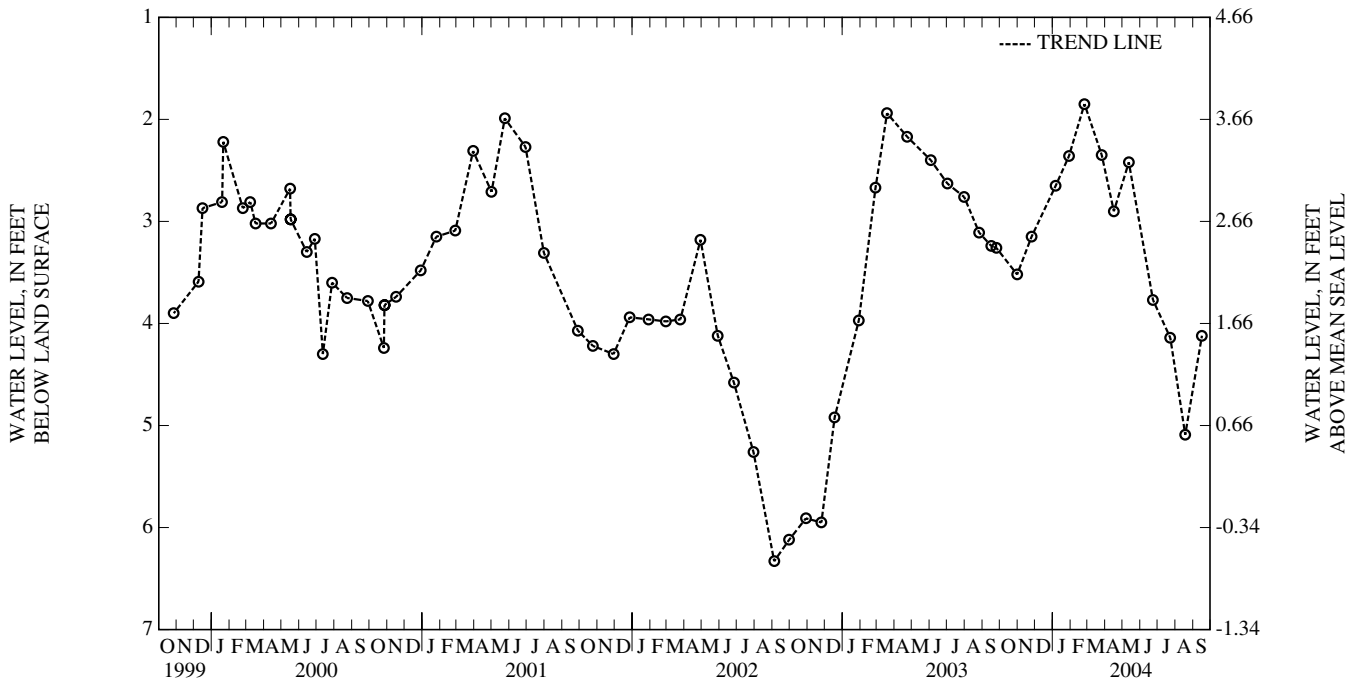
PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.37 ft above land surface, April 22, 1991; lowest recorded, 6.33 ft below land surface, September 4, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	3.52	JAN 29, 2004	2.36	APR 16, 2004	2.90	JUL 23, 2004	4.14
NOV 25	3.15	FEB 25	1.85	MAY 12	2.42	AUG 18	5.09
JAN 06, 2004	2.65	MAR 26	2.35	JUN 23	3.77	SEP 16	4.12

HIGHEST 1.85 FEB 25, 2004
 LOWEST 5.09 AUG 18, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Dg 23. SITE ID.--381428075081401. PERMIT NUMBER.--WO-94-1412.

LOCATION.--Lat 38°14'28", long 75°08'10", Hydrologic Unit 020060010, at Assateague Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Beaverdam Sands of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water table well, depth 85 ft; casing diameter 2 in., to 82 ft; screen diameter 2 in., from 82 to 85 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel from October 1999, to current year.

DATUM.--Elevation of land surface is 5.18 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.10 ft above land surface.

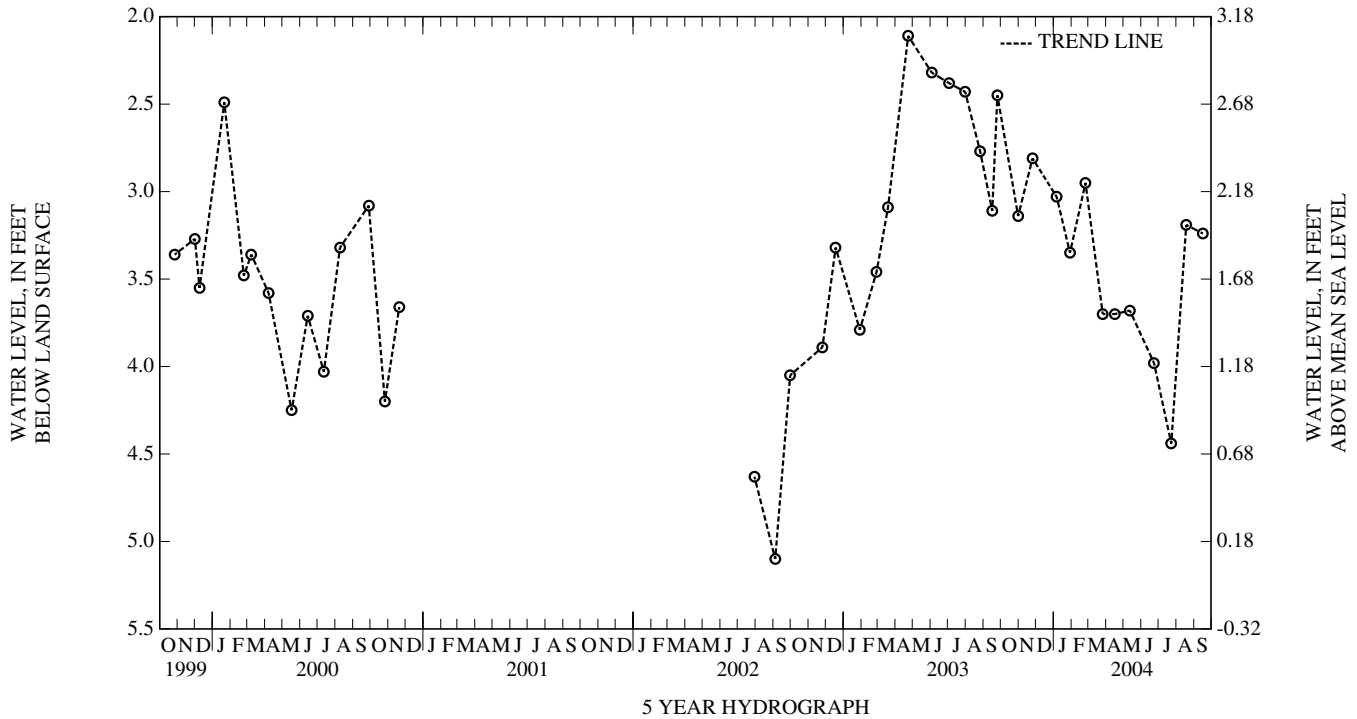
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--October 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.11 ft above land surface, April 23, 2003; lowest recorded, 5.10 ft below land surface, September 4, 2002.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	3.14	JAN 29, 2004	3.35	APR 16, 2004	3.70	JUL 23, 2004	4.44
NOV 25	2.81	FEB 25	2.95	MAY 12	3.68	AUG 18	3.19
JAN 06, 2004	3.03	MAR 26	3.70	JUN 23	3.98	SEP 16	3.24
HIGHEST	2.81	NOV 25, 2003					
LOWEST	4.44	JUL 23, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Dg 24. SITE ID.--381428075081402. PERMIT NUMBER.--WO-94-1411.

LOCATION.--Lat 38°14'28", long 75°08'10", Hydrologic Unit 020060010, at Assateague Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Sinepuxent Formation of Pleistocene age. Aquifer code: 112SNPX.

WELL CHARACTERISTICS.--Drilled, observation, water table well, depth 35 ft; casing diameter 2 in., to 32 ft; screen diameter 2 in., from 32 to 35 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel from October 1999, to current year.

DATUM.--Elevation of land surface is 5.08 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.70 ft above land surface.

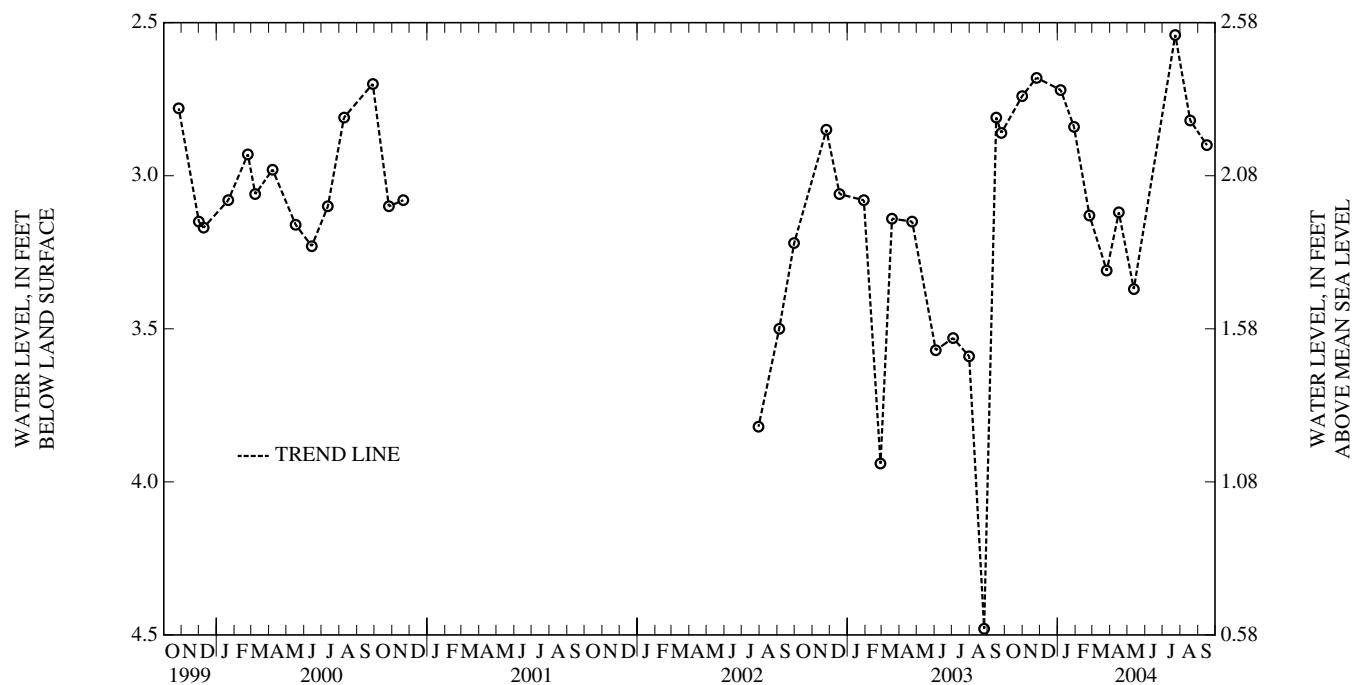
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--October 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.40 ft below land surface, June 23, 2004; lowest recorded, 4.48 ft below land surface, August 26, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	2.74	JAN 29, 2004	2.84	APR 16, 2004	3.12	AUG 18, 2004	2.82
NOV 25	2.68	FEB 25	3.13	MAY 12	3.37	SEP 16	2.90
JAN 06, 2004	2.72	MAR 26	3.31	JUL 23	2.54		
HIGHEST	2.54	JUL 23, 2004					
LOWEST	3.37	MAY 12, 2004					



WORCESTER COUNTY--Continued

WELL NUMBER.--WO Dg 25. SITE ID.--381428075081403. PERMIT NUMBER.--WO-94-1410.

LOCATION.--Lat 38°14'28", long 75°08'10", Hydrologic Unit 020060010, at Assateague Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Tidal Marsh Deposit of Pleistocene age. Aquifer code: 111BRRR.

WELL CHARACTERISTICS.--Drilled, observation, water table well, depth 15 ft; casing diameter 2 in., to 12 ft; screen diameter 2 in., from 12 to 15 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel from October 1999, to current year.

DATUM.--Elevation of land surface is 4.99 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.30 ft above land surface.

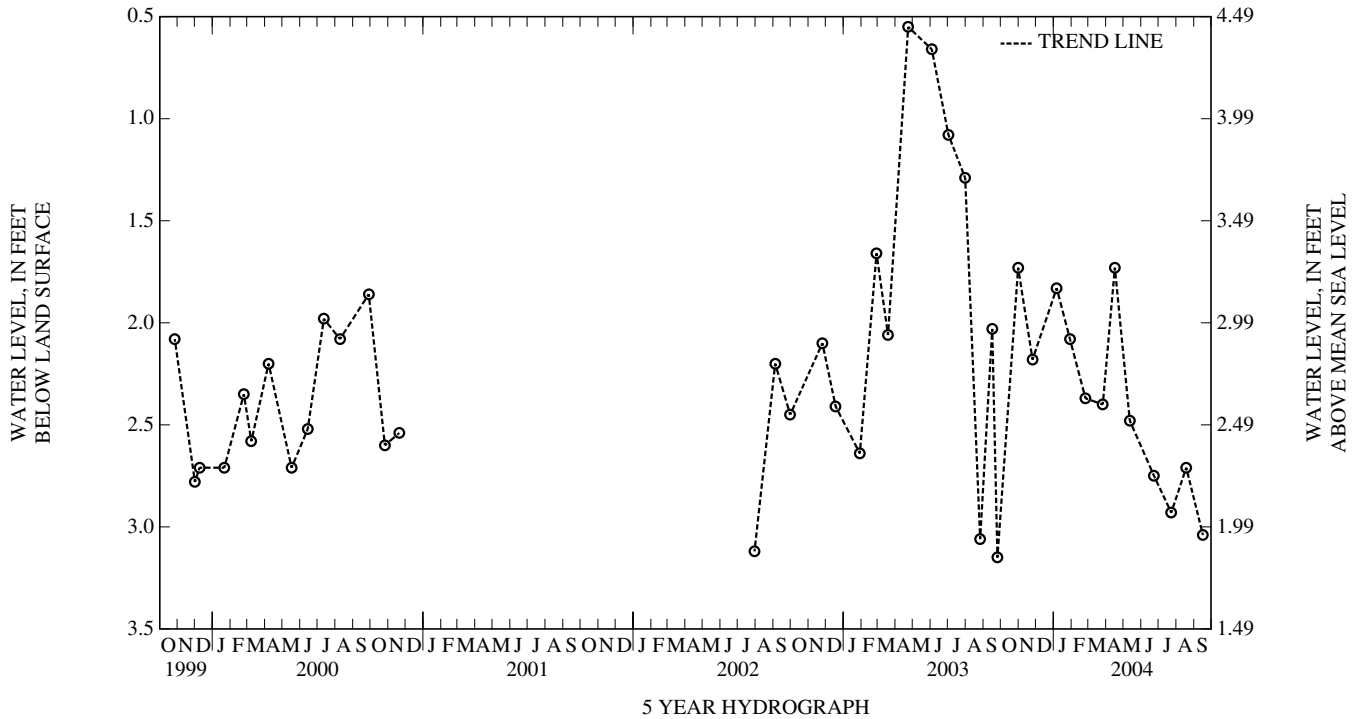
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--October 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.55 ft below land surface, March 19, 2003 and April 23, 2003; lowest recorded, 3.15 ft below land surface, September 25, 2003.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 2003	1.73	JAN 29, 2004	2.08	APR 16, 2004	1.73	JUL 23, 2004	2.93
NOV 25	2.18	FEB 25	2.37	MAY 12	2.48	AUG 18	2.71
JAN 06, 2004	1.83	MAR 26	2.40	JUN 23	2.75	SEP 16	3.04
HIGHEST	1.73	OCT 31, 2003	APR 16, 2004				
LOWEST	3.04	SEP 16, 2004					



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Fb 2. SITE ID.--380408075335701. PERMIT NUMBER.--WO-00-1633.

LOCATION.--Lat 38°04'08", long 75°33'57", Hydrologic Unit 02060009, near 7th and Young St., Pocomoke City. Owner: Pocomoke City.

AQUIFER.--Pocomoke aquifer in the Eastover Formation or Yorktown Formation of Upper Miocene-Pliocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 130 ft; casing diameter 16 in., to 100 ft; casing diameter 10 in., to 100 ft; screen diameter 9.5 in., from 100 to 130 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 1.5 in. casing extension, 3.30 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. A water level was reported at 30 ft below land surface on October 3, 1947. The well was inaccessible from January 1997 through July 1997 due to construction equipment being parked over the well. Water levels are affected by local ground-water withdrawal.

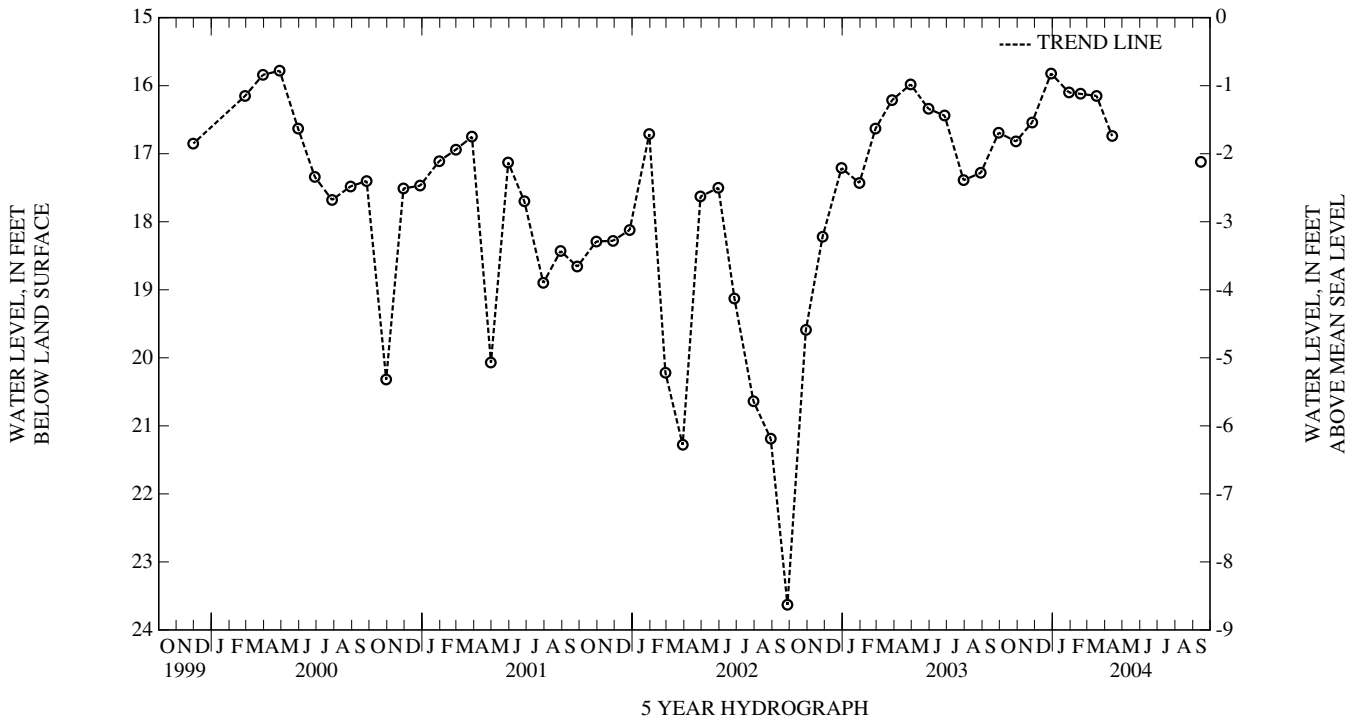
PERIOD OF RECORD.--January 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.20 ft below land surface, February 25, 1998; lowest measured, 49.70 ft below land surface, July 1, 1954.

WATER LEVELS, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2003	16.82	DEC 29, 2003	15.82	FEB 18, 2004	16.12	APR 13, 2004	16.74
NOV 26	16.54	JAN 29, 2004	16.10	MAR 17	16.15	SEP 14	17.12

HIGHEST 15.82 DEC 29, 2003
 LOWEST 17.12 SEP 14, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WELL NUMBER.--AC Aa 1. SITE ID.--385225076590101. PERMIT NUMBER.--DCMW001-03.

LOCATION.--Lat 38°52'25", long 75°59'01", Hydrologic Unit 02070010, at the Anacostia Recreation Center. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Quaternary Alluvium Formation of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 30 ft; casing diameter 2 in., to 25 ft; screen diameter 1.25 in., from 25 to 30 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 5.65 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.12 ft below land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well. Water levels affected by tides.

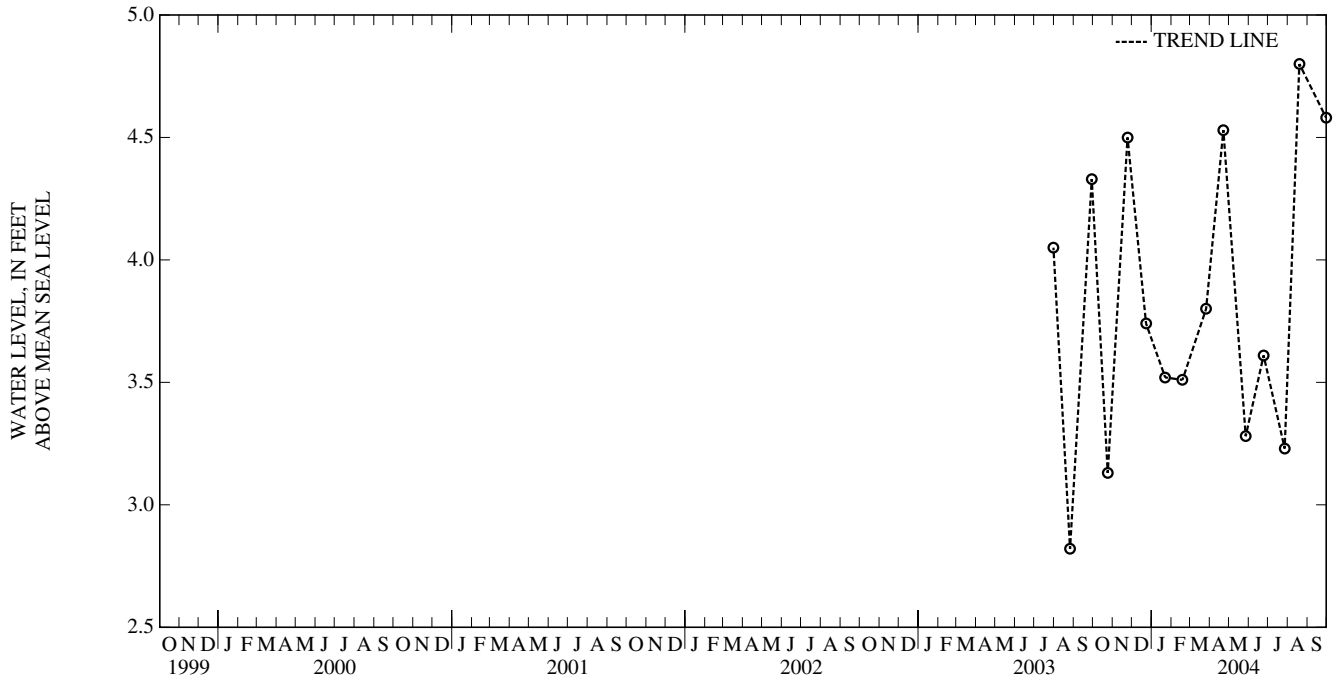
PERIOD OF RECORD.--July 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.80 ft above sea level, August 19, 2004; lowest measured, 2.82 ft above sea level, August 26, 2003.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	3.13	JAN 22, 2004	3.52	APR 22, 2004	4.53	JUL 27, 2004	3.23
NOV 24	4.50	FEB 18	3.51	MAY 27	3.28	AUG 19	4.80
DEC 23	3.74	MAR 26	3.80	JUN 24	3.61	SEP 30	4.58

LOWEST 3.13 OCT 24, 2003
 HIGHEST 4.80 AUG 19, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WELL NUMBER.--WE Bb 3. SITE ID.--385504076563801. PERMIT NUMBER.--DCMW001-02.

LOCATION.--Lat 38°55'03.6", long 76°56'37.7", Hydrologic Unit 02070010, south of the New York Avenue Bridge over the Anacostia River. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Quaternary Alluvium Formation of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 25 ft; casing diameter 2 in., to 15 ft depth; screen diameter 2 in., from 15 to 25 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, June 2003 to current year.

DATUM.--Elevation of land surface is 12.30 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 3.60 ft above land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well. Water levels affected by tides.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.39 ft above sea level, July 11, 2003; lowest measured, 0.09 ft below sea level, April 25, 2003.

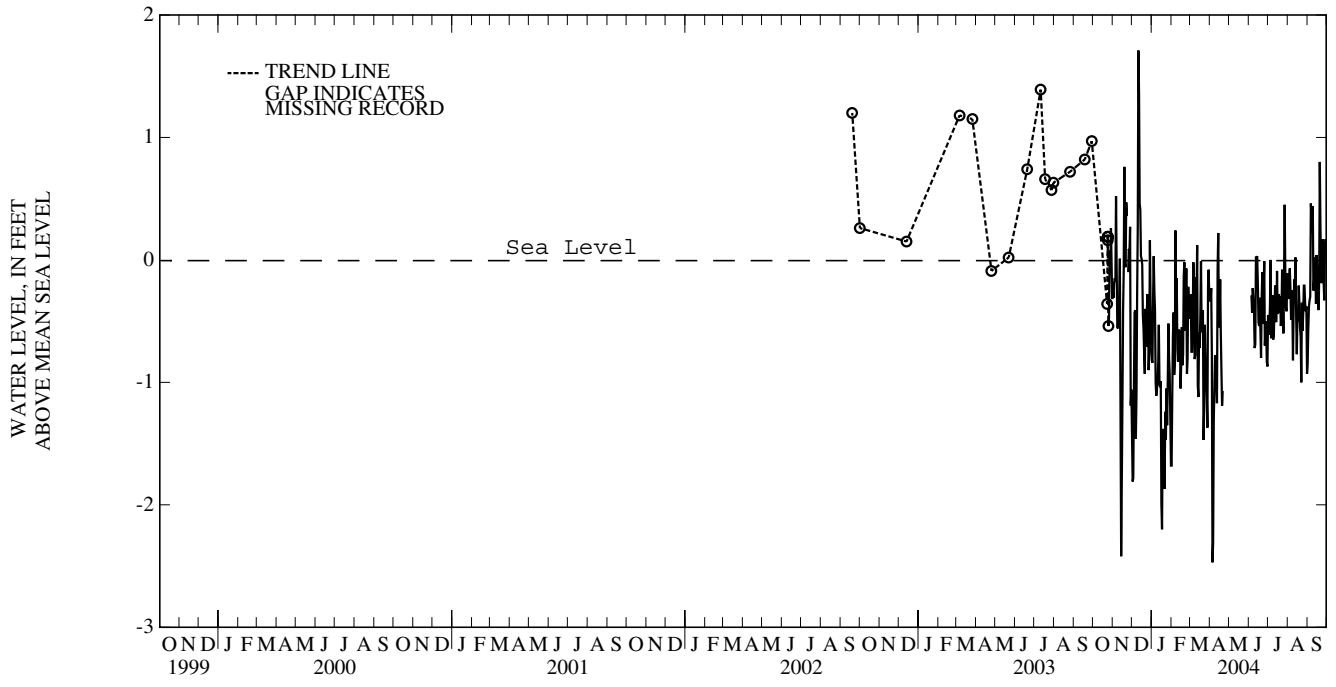
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23, 2003	-.36	DEC 23, 2003	.26	APR 22, 2004	.95	AUG 06, 2004	-.33
24	.19	JAN 22, 2004	-.93	JUN 04	1.06	19	.48
24	.16	FEB 20	1.19	24	-.21	SEP 30	2.44
NOV 24	1.92	MAR 26	-.13	AUG 05	.58		
LOWEST	-.36	OCT 23, 2003					
HIGHEST	2.44	SEP 30, 2004					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	---	---	1.11	-0.25	0.01	-1.43	0.45	-0.82	-0.44	-1.68	0.68	-0.43
2	---	---	1.04	-0.31	-0.59	-1.81	0.57	-0.84	0.15	-1.13	0.94	-0.28
3	---	---	1.21	-0.19	-0.47	-1.78	1.17	-0.30	1.05	-0.63	0.31	-0.75
4	---	---	1.20	-0.15	0.73	-1.05	1.05	0.03	0.61	-0.43	0.71	-0.75
5	---	---	1.83	-0.18	1.32	-0.43	1.14	-0.25	0.27	-0.94	1.28	-0.50
6	---	---	1.88	0.52	0.70	-0.41	0.54	-0.41	1.93	-0.84	1.53	-0.02
7	---	---	1.28	-0.08	-0.35	-1.46	0.08	-1.00	1.69	0.24	1.07	-0.28
8	---	---	0.79	-0.55	0.69	-1.10	0.34	-1.11	1.00	-0.33	0.77	-0.81
9	---	---	0.75	-0.56	1.56	-0.29	0.21	-1.06	0.99	-0.15	1.31	-0.78
10	---	---	1.02	-0.37	1.93	0.27	0.22	-1.00	0.96	-0.73	1.46	-0.14
11	---	---	1.19	-0.35	3.17	1.71	1.20	-0.85	0.63	-0.83	1.61	-0.35
12	---	---	1.41	0.01	2.22	1.36	1.20	-0.53	0.84	-0.57	1.90	0.12
13	---	---	1.36	-1.23	2.22	0.46	0.36	-1.02	0.77	-0.58	0.92	-1.03
14	---	---	-0.87	-2.42	2.11	0.41	0.72	-1.03	0.68	-0.63	0.33	-1.12
15	---	---	-0.49	-1.81	2.10	0.03	1.04	-0.99	0.16	-1.05	0.87	-0.59
16	---	---	0.45	-1.15	1.20	0.01	-0.46	-1.99	0.60	-0.86	0.91	-0.72
17	---	---	0.76	-0.42	1.05	-0.04	-0.74	-2.20	0.98	-0.55	1.17	-0.45
18	---	---	1.19	-0.09	0.70	-0.45	0.75	-1.38	0.41	-0.86	1.55	-0.01
19	---	---	2.79	0.76	0.88	-0.56	-0.21	-1.42	1.30	-0.77	1.52	-0.59
20	---	---	2.47	-0.03	0.37	-0.76	-0.51	-1.66	1.67	-0.13	1.85	-0.58
21	---	---	2.17	-0.06	0.94	-0.93	-0.21	-1.87	1.48	-0.02	1.56	-0.41
22	---	---	1.82	0.47	0.95	-0.40	0.05	-1.24	0.91	-0.58	-0.21	-1.47
23	---	---	2.13	0.36	0.76	-0.71	-0.06	-1.47	1.00	-0.52	0.50	-1.21
24	---	---	---	---	1.34	-0.47	0.39	-1.05	1.37	-0.07	0.85	-0.53
25	1.15	-0.54	1.59	-0.10	1.08	-0.28	0.11	-1.35	0.95	-0.93	0.52	-0.82
26	1.41	-0.47	1.69	0.09	1.08	-0.30	0.18	-0.99	0.61	-0.81	0.37	-0.94
27	1.75	0.08	1.76	0.06	0.69	-0.90	0.73	-0.52	0.95	-0.22	0.14	-1.11
28	1.61	-0.12	1.81	0.27	1.08	-0.73	0.67	-0.80	0.73	-0.38	-0.04	-1.37
29	1.69	0.26	1.82	-1.19	1.50	0.16	0.12	-0.93	0.60	-0.48	1.10	-0.21
30	1.71	-0.02	-0.01	-1.06	1.46	-0.35	0.00	-1.30	---	---	1.06	-0.08
31	1.33	-0.32	---	---	0.60	-0.69	-0.92	-1.68	---	---	0.84	-0.31
MONTH	1.75	-0.54	2.79	-2.42	3.17	-1.81	1.20	-2.20	1.93	-1.68	1.90	-1.47

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.27	-0.27	---	---	---	---	1.31	-0.45	1.65	-0.22	1.04	-0.84
2	0.98	-0.34	---	---	---	---	1.35	-0.48	1.48	-0.32	0.96	-0.56
3	1.03	-0.23	---	---	---	---	1.16	-0.61	1.50	-0.17	1.34	-0.38
4	1.45	-0.77	---	---	---	---	3.39	-0.36	1.58	-0.07	1.34	-0.33
5	-0.77	-2.47	---	---	1.97	-0.29	2.31	0.00	1.58	-0.24	1.10	-0.30
6	-0.42	-2.31	---	---	1.20	-0.43	1.37	-0.64	1.15	-0.49	1.90	0.46
7	0.32	-1.31	---	---	1.56	-0.23	1.20	-0.56	0.89	-0.25	2.09	0.35
8	0.65	-1.04	---	---	1.41	-0.32	1.38	-0.29	1.26	-0.36	1.49	0.22
9	0.79	-0.78	---	---	1.14	-0.41	1.14	-0.65	0.95	-0.82	2.05	0.44
10	0.69	-0.81	---	---	0.95	-0.72	0.83	-0.61	0.78	-0.41	1.15	-0.25
11	0.45	-0.94	---	---	0.72	-0.69	0.86	-0.43	1.22	-0.16	1.11	-0.17
12	0.62	-1.17	---	---	1.48	0.02	1.13	-0.21	1.66	-0.19	1.42	0.02
13	1.38	-0.07	---	---	1.56	0.02	1.39	-0.50	1.57	0.02	1.41	-0.06
14	1.33	0.22	---	---	1.60	0.03	1.29	-0.50	0.82	-0.46	1.22	-0.36
15	0.34	-0.55	---	---	1.40	-0.20	1.57	-0.09	0.81	-0.77	1.88	0.04
16	0.99	-0.52	---	---	0.97	-0.51	1.04	-0.44	1.16	-0.45	1.52	-0.12
17	1.14	-0.16	---	---	0.96	-0.54	1.05	-0.43	1.22	-0.50	2.20	-0.31
18	0.92	-0.60	---	---	1.12	-0.31	1.36	-0.28	1.32	-0.21	2.20	-0.41
19	0.50	-0.91	---	---	1.00	-0.58	1.08	-0.34	1.22	-0.35	1.82	-0.16
20	0.35	-1.19	---	---	0.67	-0.80	1.17	-0.30	1.11	-0.55	2.11	0.80
21	0.50	-1.07	---	---	1.32	-0.31	0.90	-0.54	1.02	-0.63	2.21	0.27
22	---	---	---	---	1.55	-0.10	1.11	-0.45	0.70	-1.00	1.65	-0.07
23	---	---	---	---	0.92	-0.52	1.26	-0.08	1.04	-0.35	1.43	-0.19
24	---	---	---	---	1.19	-0.26	1.21	-0.33	1.20	-0.58	1.54	-0.01
25	---	---	---	---	1.27	-0.01	0.79	-0.60	1.02	-0.44	1.81	0.17
26	---	---	---	---	1.46	-0.70	1.21	-0.14	1.36	-0.21	1.63	-0.18
27	---	---	---	---	0.79	-0.57	2.25	0.45	1.42	-0.21	1.52	-0.33
28	---	---	---	---	1.05	-0.50	2.97	-0.11	1.32	-0.35	2.58	0.10
29	---	---	---	---	0.93	-0.83	1.31	-0.39	1.21	-0.42	1.84	0.17
30	---	---	---	---	0.97	-0.87	1.39	-0.42	1.28	-0.38	---	---
31	---	---	---	---	---	---	1.68	-0.11	1.03	-0.93	---	---
MONTH	1.45	-2.47	---	---	1.97	-0.87	3.39	-0.65	1.66	-1.00	2.58	-0.84
YEAR	3.39	-2.47										

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WELL NUMBER.--WE Bb 4. SITE ID.--385504076563802. PERMIT NUMBER.--DCMW004-02.

LOCATION.--Lat 38°55'03.6", long 76°56'37.7", Hydrologic Unit 02070010, south of the New York Avenue Bridge over the Anacostia River. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Quaternary Alluvium Formation of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 32 ft; casing diameter 2 in., to 32 ft depth; screen diameter 2 in., from 22 to 32 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, June 2003 to current year.

DATUM.--Elevation of land surface is 12.37 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 3.00 ft above land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well. Water levels affected by tides.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.41 ft above sea level, July 11, 2003; lowest measured, 0.08 ft below sea level, April 25, 2003.

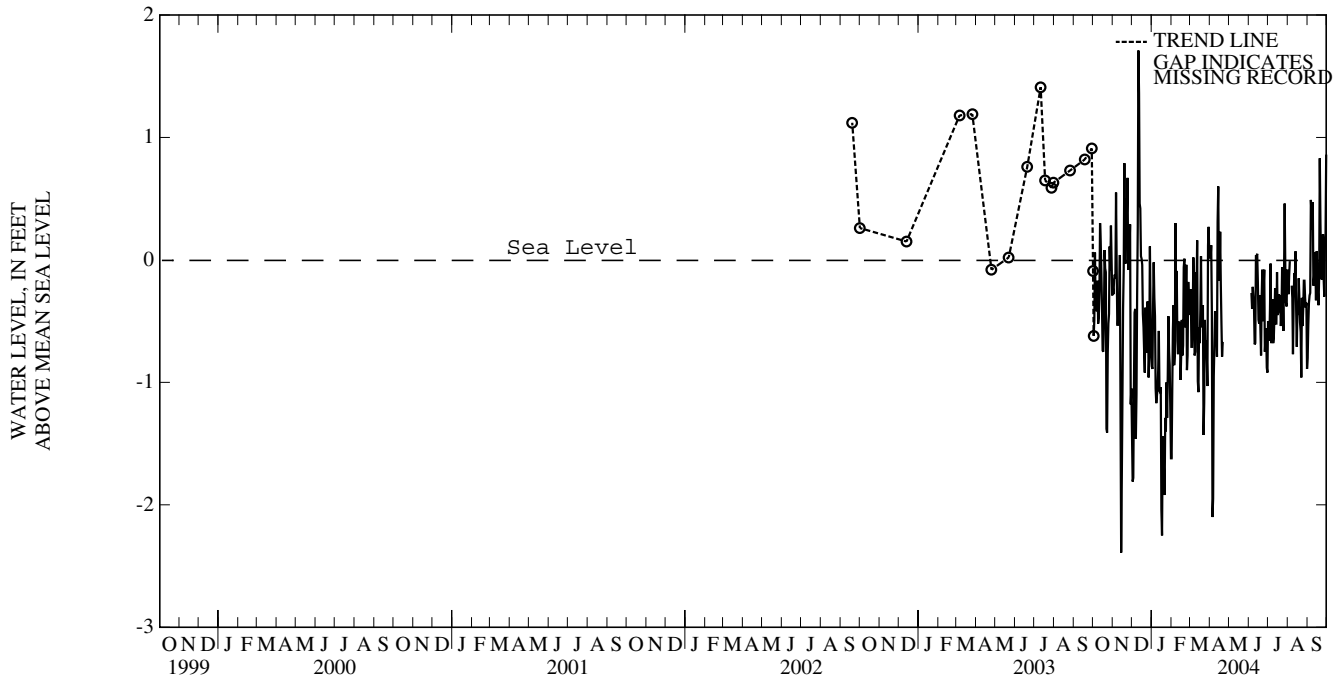
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23, 2003	-.35	JAN 22, 2004	-.01	JUN 04, 2004	.91	AUG 19, 2004	.46
24	.26	FEB 20	1.21	24	-.22	SEP 30	2.40
NOV 24	1.94	MAR 26	-.14	AUG 05	.56		
DEC 23	.26	APR 22	.92	06	-.36		
LOWEST	-.36	AUG 06, 2004					
HIGHEST	2.40	SEP 30, 2004					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	1.45	-0.09	1.13	-0.22	0.01	-1.43	0.39	-0.87	-0.39	-1.62	0.71	-0.40
2	1.40	-0.62	1.06	-0.28	-0.59	-1.81	0.50	-0.89	0.20	-1.07	0.96	-0.24
3	0.93	-0.49	1.23	-0.16	-0.48	-1.78	1.10	-0.36	1.09	-0.57	0.34	-0.71
4	1.57	0.06	1.22	-0.12	0.72	-1.05	0.98	-0.02	0.66	-0.37	0.73	-0.71
5	1.36	-0.40	1.84	-0.15	1.31	-0.43	1.07	-0.31	0.32	-0.86	1.30	-0.46
6	1.14	-0.37	1.90	0.55	0.69	-0.40	0.47	-0.46	1.98	-0.77	1.55	0.02
7	1.27	-0.42	1.30	-0.05	-0.34	-1.46	0.02	-1.05	1.75	0.30	1.10	-0.25
8	1.27	-0.17	0.80	-0.53	0.68	-1.10	0.27	-1.17	1.06	-0.27	0.80	-0.78
9	0.98	-0.52	0.77	-0.53	1.55	-0.29	0.14	-1.11	1.04	-0.09	1.33	-0.75
10	1.17	-0.47	1.03	-0.34	1.93	0.27	0.15	-1.05	1.01	-0.66	1.48	-0.10
11	1.66	-0.26	1.21	-0.32	3.16	1.71	1.13	-0.90	0.67	-0.77	1.62	-0.31
12	1.89	0.30	1.42	0.04	2.22	1.36	1.13	-0.58	0.89	-0.51	1.92	0.16
13	1.64	0.15	1.38	-1.21	2.22	0.46	0.30	-1.07	0.82	-0.51	0.95	-0.99
14	2.42	-0.10	-0.86	-2.39	2.10	0.42	0.65	-1.08	0.73	-0.56	0.35	-1.08
15	2.40	-0.38	-0.48	-1.79	2.09	0.03	0.98	-1.04	0.21	-0.98	0.90	-0.55
16	0.56	-0.74	0.46	-1.12	1.19	0.01	-0.52	-2.04	0.65	-0.78	0.93	-0.68
17	0.63	-0.75	0.77	-0.40	1.04	-0.04	-0.80	-2.25	1.03	-0.49	1.19	-0.41
18	0.74	-0.53	1.20	-0.07	0.70	-0.44	0.68	-1.44	0.46	-0.78	1.58	0.03
19	1.12	0.08	2.80	0.79	0.87	-0.55	-0.28	-1.48	1.35	-0.70	1.54	-0.55
20	1.13	-0.07	2.48	0.00	0.37	-0.75	-0.57	-1.72	1.68	-0.06	1.87	-0.54
21	1.67	-0.10	2.18	-0.03	0.93	-0.92	-0.27	-1.92	1.50	0.01	1.58	-0.37
22	0.72	-1.38	1.83	0.50	0.94	-0.39	0.05	-1.29	0.93	-0.55	-0.19	-1.43
23	0.32	-1.41	2.15	0.39	0.68	-0.76	-0.02	-1.40	1.01	-0.48	0.53	-1.17
24	0.91	-0.76	2.20	0.67	1.27	-0.52	0.43	-1.00	1.39	-0.04	0.88	-0.49
25	1.16	-0.52	1.59	-0.08	1.01	-0.34	0.15	-1.29	0.97	-0.90	0.54	-0.78
26	1.42	-0.44	1.69	0.10	1.01	-0.36	0.22	-0.94	0.63	-0.78	0.54	-0.66
27	1.77	0.11	1.75	0.07	0.63	-0.96	0.77	-0.46	0.97	-0.18	0.45	-0.79
28	1.63	-0.09	1.81	0.29	1.01	-0.78	0.71	-0.75	0.75	-0.34	0.28	-1.03
29	1.70	0.28	1.82	-1.18	1.43	0.11	0.17	-0.86	0.62	-0.45	1.42	0.12
30	1.72	0.01	-0.01	-1.05	1.40	-0.40	0.05	-1.23	---	---	1.39	0.27
31	1.34	-0.29	---	---	0.54	-0.74	-0.86	-1.62	---	---	1.17	0.03
MONTH	2.42	-1.41	2.80	-2.39	3.16	-1.81	1.13	-2.25	1.98	-1.62	1.92	-1.43

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.61	0.07	---	---	---	---	1.24	-0.50	1.67	-0.17	1.06	-0.80
2	1.32	0.01	---	---	---	---	1.28	-0.53	1.50	-0.28	0.98	-0.53
3	1.37	0.12	---	---	---	---	1.10	-0.66	1.53	-0.13	1.35	-0.35
4	1.78	-0.41	---	---	---	---	3.33	-0.40	1.61	-0.01	1.35	-0.29
5	-0.41	-2.10	---	---	1.97	-0.27	2.27	-0.03	---	---	1.12	-0.27
6	-0.08	-1.95	---	---	1.21	-0.40	1.32	-0.68	---	---	1.92	0.49
7	0.67	-0.95	---	---	1.56	-0.22	1.15	-0.58	0.92	-0.21	2.10	0.38
8	1.01	-0.69	---	---	1.41	-0.30	1.33	-0.32	1.29	-0.31	1.51	0.25
9	1.14	-0.42	---	---	1.14	-0.39	1.10	-0.68	0.98	-0.77	2.06	0.47
10	1.05	-0.45	---	---	0.96	-0.69	0.79	-0.63	0.82	-0.37	1.17	-0.21
11	0.81	-0.57	---	---	0.72	-0.68	0.83	-0.45	1.25	-0.11	1.13	-0.14
12	0.99	-0.79	---	---	1.47	0.03	1.10	-0.23	1.69	-0.14	1.44	0.06
13	1.76	0.31	---	---	1.56	0.03	1.35	-0.52	1.61	0.07	1.43	-0.03
14	1.70	0.60	---	---	1.60	0.05	1.26	-0.52	0.86	-0.41	1.23	-0.33
15	0.72	-0.17	---	---	1.40	-0.18	1.54	-0.10	0.85	-0.71	1.89	0.07
16	1.37	-0.14	---	---	0.97	-0.49	1.02	-0.45	1.20	-0.40	1.54	-0.09
17	1.52	0.23	---	---	0.96	-0.52	1.03	-0.43	1.26	-0.45	2.22	-0.27
18	1.30	-0.20	---	---	1.12	-0.29	1.35	-0.28	1.35	-0.15	2.22	-0.37
19	0.88	-0.52	---	---	1.00	-0.57	1.06	-0.34	1.23	-0.31	1.83	-0.12
20	0.74	-0.79	---	---	0.67	-0.78	1.15	-0.29	1.13	-0.51	2.13	0.83
21	0.89	-0.67	---	---	1.31	-0.30	0.89	-0.54	1.04	-0.59	2.23	0.30
22	---	---	---	---	1.55	-0.08	1.10	-0.44	0.72	-0.96	1.67	-0.04
23	---	---	---	---	0.93	-0.50	1.25	-0.06	1.06	-0.31	1.44	-0.16
24	---	---	---	---	1.09	-0.24	1.21	-0.32	1.21	-0.54	1.55	0.02
25	---	---	---	---	1.18	-0.08	0.79	-0.58	1.03	-0.40	1.83	0.21
26	---	---	---	---	1.38	-0.75	1.22	-0.11	1.37	-0.17	1.65	-0.15
27	---	---	---	---	0.71	-0.63	2.25	0.46	1.43	-0.17	1.53	-0.30
28	---	---	---	---	0.96	-0.56	2.97	-0.07	1.34	-0.31	2.60	0.14
29	---	---	---	---	0.85	-0.88	1.33	-0.35	1.22	-0.39	1.87	0.21
30	---	---	---	---	0.90	-0.92	1.40	-0.38	1.30	-0.35	2.93	0.86
31	---	---	---	---	---	---	1.70	-0.08	1.05	-0.89	---	---
MONTH	1.78	-2.10	---	---	1.97	-0.92	3.33	-0.68	1.69	-0.96	2.93	-0.80
YEAR	3.33	-2.39										

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WELL NUMBER.--WE Ca 29. SITE ID.--385238076581501. PERMIT NUMBER.--DCMW005-02.

LOCATION.--Lat 38°52'38.4", long 76°58'15.3", Hydrologic Unit 02070010, in Anacostia Park near the roller-skating pavilion. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Quaternary Alluvium Formation of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 48.5 ft; casing diameter 2 in., to 38.5 ft depth; screen diameter 2 in., from 38.5 to 48.5 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 13.38 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.15 ft below land surface.

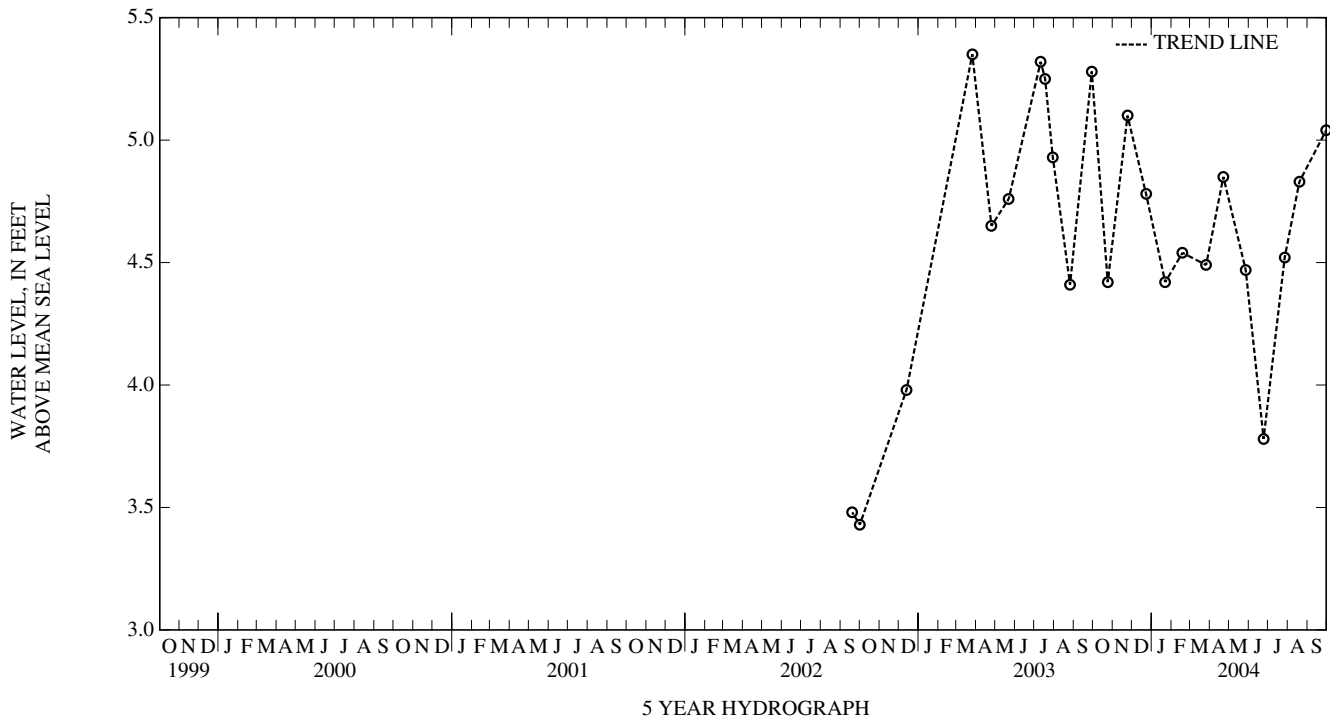
REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.35 ft above sea level, March 26, 2003; lowest measured, 3.43 ft above sea level, October 1, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	4.42	JAN 22, 2004	4.42	APR 22, 2004	4.85	JUL 27, 2004	4.52
NOV 24	5.10	FEB 18	4.54	MAY 27	4.47	AUG 19	4.83
DEC 23	4.78	MAR 26	4.49	JUN 24	3.78	SEP 30	5.04
LOWEST 3.78 JUN 24, 2004							
HIGHEST 5.10 NOV 24, 2003							



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WELL NUMBER.--WE Ca 32. SITE ID.--385332076594701. PERMIT NUMBER.--DCMW001-04.

LOCATION.--Lat 39°17'10", long 75°58'40", Hydrologic Unit 02070010, near the intersection of Massachusetts Avenue and 7th Street. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Terrace deposits of Quaternary age. Aquifer code: 110TRRC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 29 ft; casing diameter 4 in., to 19 ft; screen diameter 4 in. from 19 to 29 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 79.98 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.39 ft below land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

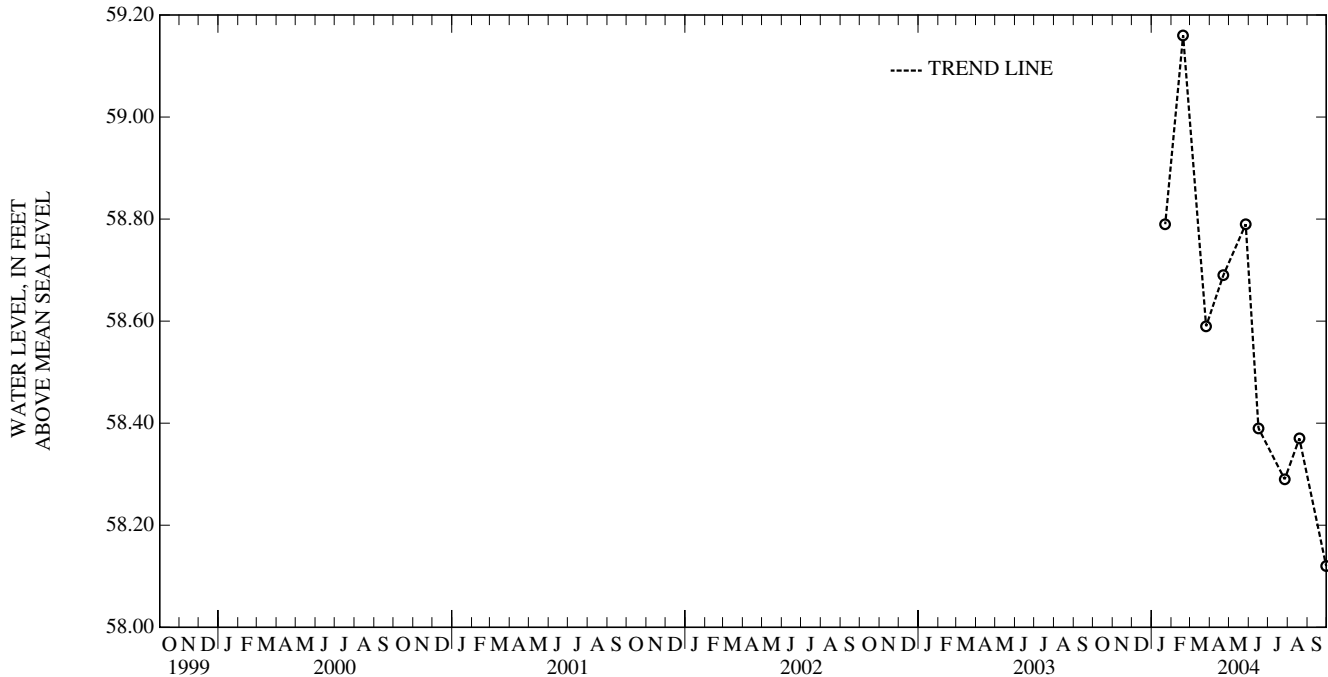
PERIOD OF RECORD.--January 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.16 ft above sea level, February 19, 2004; lowest measured, 58.12 ft above sea level, September 30, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 2004	58.79	APR 22, 2004	58.69	JUL 27, 2004	58.29
FEB 19	59.16	MAY 27	58.79	AUG 19	58.37
MAR 26	58.59	JUN 16	58.39	SEP 30	58.12

LOWEST 58.12 SEP 30, 2004
 HIGHEST 59.16 FEB 19, 2004



OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WELL NUMBER.--WE Cb 5. SITE ID.--385443076562801. PERMIT NUMBER.--DCMW002-02.

LOCATION.--Lat 38°54'43.5", long 76°56'28.4", Hydrologic Unit 00002070010, at Kenilworth Aquatic Gardens. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Terrace Deposits of Quaternary age. Aquifer code: 110TRRC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 22.6 ft; casing diameter 2 in., to 12.6 ft depth; screen diameter 2 in., from 12.6 to 22.6 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, July 2003 to current year.

DATUM.--Elevation of land surface is 18.53 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.20 ft below land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

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

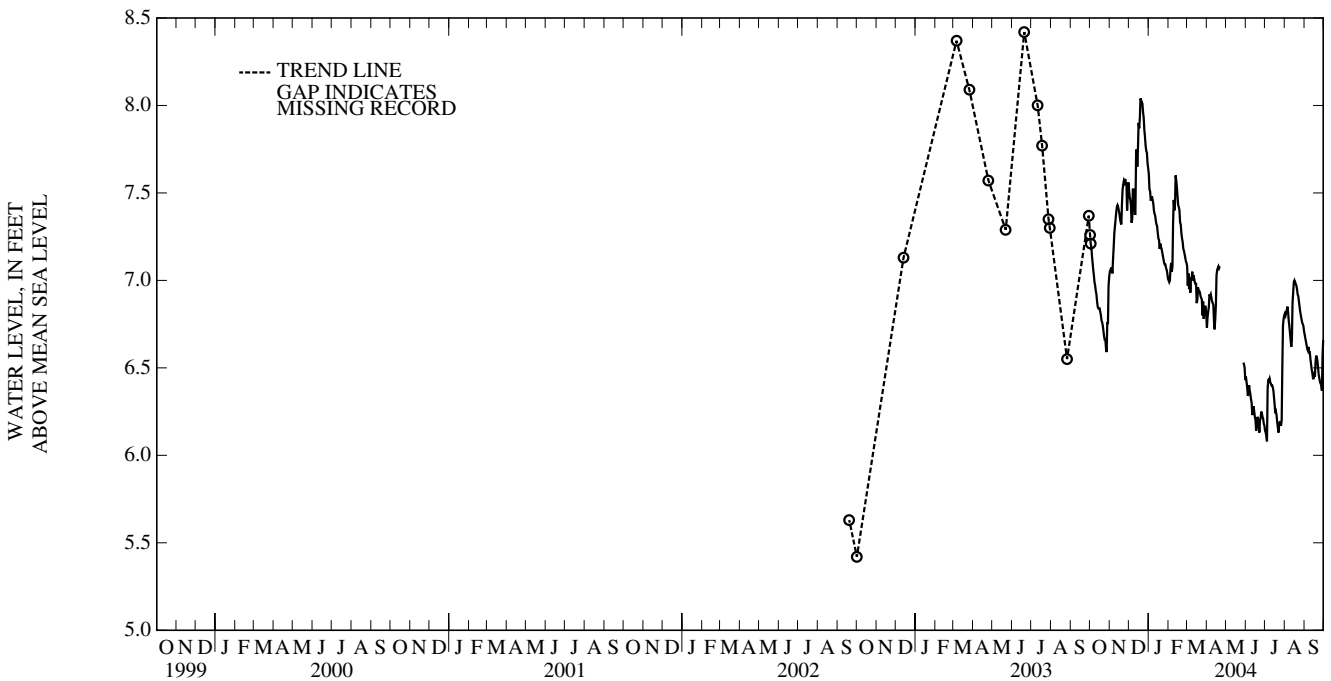
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.42 ft above sea level, June 20, 2003; lowest measured, 5.42 ft above sea level, October 1, 2002.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	6.70	JAN 22, 2004	7.22	MAY 27, 2004	6.59	SEP 30, 2004	6.65
NOV 24	7.61	FEB 19	7.41	JUN 24	6.21	30	6.73
DEC 23	7.99	MAR 26	6.88	JUL 27	6.29		
24	8.00	APR 22	7.12	AUG 19	7.01		
LOWEST	6.21	JUN 24, 2004					
HIGHEST	7.61	NOV 24, 2003					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	7.29	7.26	7.06	7.05	7.58	7.52	7.65	7.61	7.01	7.00	7.11	7.08
2	7.26	7.21	7.07	7.06	7.53	7.48	7.62	7.52	7.00	6.99	7.08	6.97
3	7.21	7.19	7.08	7.07	7.49	7.46	7.53	7.51	7.09	7.00	7.05	7.04
4	7.19	7.14	7.08	7.07	7.46	7.43	7.55	7.46	7.19	7.07	7.05	6.95
5	7.14	7.10	7.14	7.04	7.43	7.33	7.55	7.46	7.17	7.10	7.03	7.01
6	7.10	7.06	7.20	7.12	7.53	7.35	7.55	7.48	7.15	7.05	7.06	6.93
7	7.06	7.03	7.27	7.19	7.56	7.52	7.48	7.46	7.33	7.08	7.11	7.01
8	7.03	6.99	7.31	7.27	7.53	7.52	7.46	7.44	7.53	7.33	7.09	7.01
9	6.99	6.97	7.35	7.31	7.52	7.49	7.44	7.40	7.53	7.46	7.06	7.05
10	6.97	6.94	7.40	7.35	7.55	7.38	7.41	7.38	7.46	7.40	7.05	7.00
11	6.94	6.92	7.42	7.39	7.70	7.38	7.38	7.37	7.65	7.44	7.06	7.03
12	6.92	6.88	7.47	7.42	7.75	7.70	7.38	7.34	7.63	7.60	7.05	7.01
13	6.88	6.85	7.47	7.43	7.80	7.75	7.36	7.32	7.61	7.57	7.01	6.99
14	6.87	6.84	7.44	7.42	7.81	7.65	7.34	7.31	7.57	7.53	7.01	6.98
15	6.94	6.84	7.42	7.40	7.91	7.75	7.34	7.27	7.53	7.48	7.01	6.98
16	6.86	6.84	7.40	7.38	7.95	7.90	7.27	7.24	7.48	7.43	6.99	6.87
17	6.84	6.82	7.38	7.35	7.95	7.87	7.25	7.23	7.44	7.42	6.99	6.89
18	6.82	6.80	7.35	7.33	8.04	7.93	7.28	7.18	7.43	7.40	7.02	6.96
19	6.80	6.77	7.44	7.32	8.06	8.04	7.31	7.21	7.41	7.33	7.05	6.94
20	6.77	6.76	7.52	7.44	8.06	8.03	7.22	7.19	7.34	7.32	6.99	6.94
21	6.78	6.74	7.55	7.52	8.04	8.02	7.19	7.18	7.33	7.27	7.03	6.93
22	6.74	6.71	7.57	7.55	8.04	8.01	7.20	7.16	7.27	7.24	6.93	6.91
23	6.72	6.68	7.60	7.57	8.01	7.96	7.17	7.14	7.24	7.22	6.92	6.90
24	6.70	6.66	7.63	7.56	7.98	7.93	7.15	7.12	7.24	7.18	6.90	6.89
25	6.68	6.66	7.63	7.58	7.93	7.86	7.12	7.10	7.28	7.17	6.90	6.80
26	6.67	6.61	7.59	7.56	7.86	7.82	7.11	7.09	7.17	7.15	6.90	6.88
27	6.76	6.59	7.56	7.55	7.82	7.77	7.12	7.09	7.15	7.13	6.89	6.78
28	6.83	6.76	7.56	7.40	7.77	7.74	7.09	7.07	7.13	7.11	6.88	6.84
29	6.97	6.75	7.58	7.48	7.74	7.73	7.08	7.06	7.11	7.10	6.87	6.85
30	7.02	6.97	7.58	7.56	7.75	7.67	7.07	7.04	---	---	6.87	6.85
31	7.05	7.02	---	---	7.67	7.64	7.04	7.01	---	---	6.86	6.80
MONTH	7.29	6.59	7.63	7.04	8.06	7.33	7.65	7.01	7.65	6.99	7.11	6.78

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	6.80	6.73	---	---	6.48	6.45	6.17	6.14	6.82	6.81	6.71	6.69				
2	6.85	6.79	---	---	6.47	6.42	6.16	6.13	6.83	6.80	6.69	6.67				
3	6.85	6.82	---	---	6.43	6.39	6.14	6.11	6.86	6.82	6.67	6.65				
4	6.94	6.85	---	---	6.40	6.34	6.38	6.08	6.87	6.83	6.65	6.63				
5	6.93	6.92	---	---	6.45	6.35	6.44	6.38	6.87	6.85	6.64	6.61				
6	6.94	6.91	---	---	6.46	6.40	6.44	6.43	6.85	6.82	6.63	6.60				
7	6.94	6.92	---	---	6.40	6.37	6.45	6.43	6.82	6.77	6.64	6.62				
8	6.92	6.90	---	---	6.37	6.35	6.46	6.44	6.78	6.74	6.66	6.59				
9	6.95	6.88	---	---	6.36	6.32	6.45	6.42	6.74	6.70	6.66	6.59				
10	6.89	6.87	---	---	6.33	6.30	6.43	6.41	6.70	6.66	6.59	6.55				
11	6.89	6.86	---	---	6.30	6.23	6.42	6.40	6.68	6.62	6.55	6.52				
12	6.86	6.77	---	---	6.31	6.26	6.42	6.40	6.87	6.66	6.52	6.49				
13	6.79	6.72	---	---	6.30	6.28	6.42	6.39	6.95	6.87	6.49	6.47				
14	6.86	6.78	---	---	6.29	6.25	6.41	6.37	6.99	6.93	6.47	6.44				
15	7.03	6.86	---	---	6.26	6.22	6.38	6.33	7.00	6.99	6.48	6.44				
16	7.06	7.03	---	---	6.23	6.20	6.34	6.29	7.01	7.00	6.48	6.46				
17	7.08	7.06	---	---	6.21	6.14	6.29	6.24	7.01	6.99	6.53	6.45				
18	7.08	7.07	---	---	6.23	6.16	6.27	6.25	7.01	6.98	6.58	6.53				
19	7.09	7.08	---	---	6.25	6.22	6.27	6.23	7.00	6.97	6.58	6.57				
20	7.09	7.07	---	---	6.24	6.21	6.23	6.19	6.98	6.95	6.58	6.56				
21	7.09	7.08	---	---	6.23	6.19	6.20	6.16	6.96	6.92	6.57	6.54				
22	---	---	---	---	6.20	6.13	6.17	6.13	6.95	6.91	6.54	6.50				
23	---	---	---	---	6.22	6.20	6.20	6.17	6.92	6.88	6.50	6.46				
24	---	---	---	---	6.31	6.21	6.21	6.19	6.88	6.85	6.47	6.44				
25	---	---	---	---	6.29	6.25	6.20	6.19	6.85	6.82	6.45	6.42				
26	---	---	---	---	6.29	6.24	6.21	6.17	6.82	6.80	6.43	6.41				
27	---	---	---	---	6.24	6.22	6.50	6.20	6.80	6.78	6.41	6.40				
28	---	---	6.58	6.53	6.23	6.21	6.74	6.50	6.79	6.76	6.57	6.37				
29	---	---	6.54	6.52	6.21	6.18	6.78	6.74	6.77	6.75	6.66	6.57				
30	---	---	6.52	6.50	6.19	6.17	6.80	6.78	6.75	6.74	6.81	6.66				
31	---	---	6.51	6.43	---	---	6.81	6.80	6.74	6.71	---	---				
MONTH	7.09	6.72	6.58	6.43	6.48	6.13	6.81	6.08	7.01	6.62	6.81	6.37				
YEAR	8.06	6.08														



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WELL NUMBER.--WE Cb 6. SITE ID.--385443076562802. PERMIT NUMBER.--DCMW003-02.

LOCATION.--Lat 38°54'43.5", long 76°56'28.4", Hydrologic Unit 02070010, at Kenilworth Aquatic Gardens. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Terrace Deposits of Quaternary age. Aquifer code: 110TRRC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 46.3 ft; casing diameter 2 in., to 36.3 ft depth; screen diameter 0.75 in., from 36.3 to 46.3 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, July 2003 to current year.

DATUM.--Elevation of land surface is 18.79 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.20 ft below land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.14 ft above sea level, June 20, 2003; lowest measured, 5.04 ft above sea level, October 1, 2002.

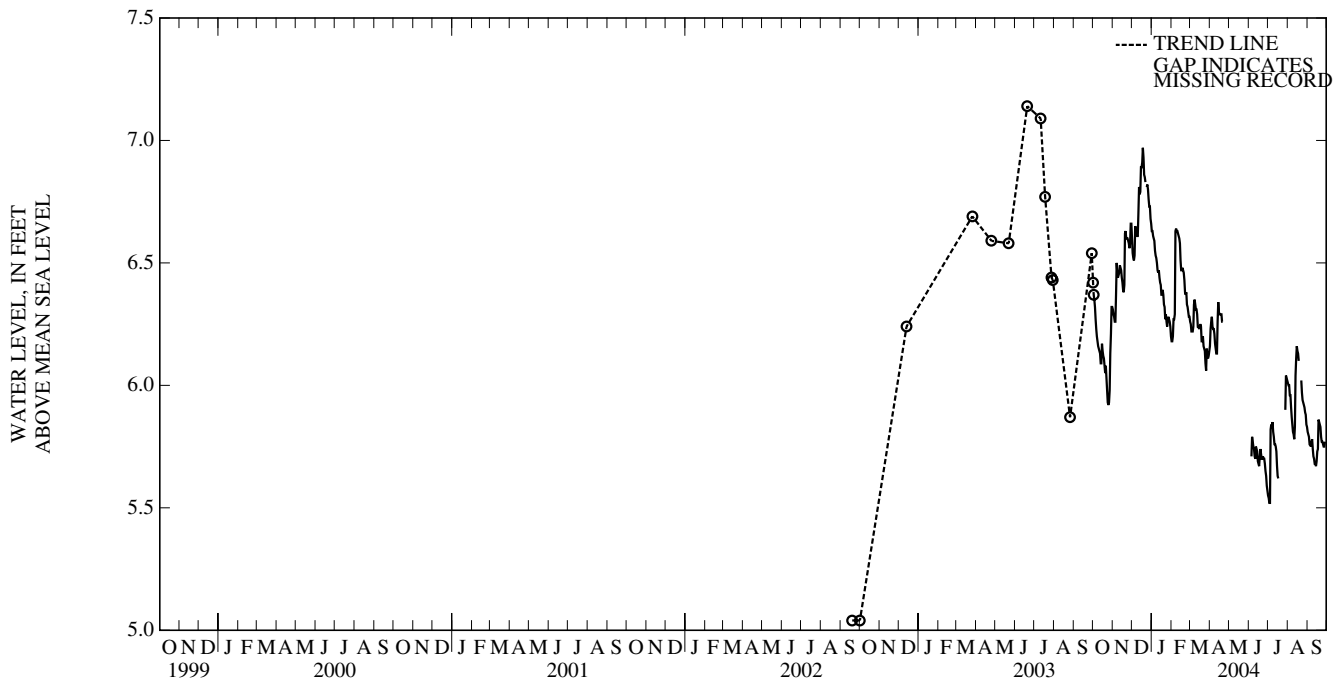
WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 2003	5.97	JAN 22, 2004	6.40	MAY 27, 2004	5.83	AUG 19, 2004	6.11
NOV 24	6.63	FEB 19	6.51	JUN 04	5.69	SEP 30	6.05
DEC 23	6.86	MAR 26	6.16	24	5.66		
24	6.86	APR 22	6.29	JUL 27	5.64		
LOWEST	5.64	JUL 27, 2004					
HIGHEST	6.63	NOV 24, 2003					

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	6.45	6.42	6.34	6.31	6.67	6.60	6.67	6.63	6.20	6.18	6.29	6.26
2	6.43	6.37	6.32	6.29	6.60	6.54	6.66	6.63	6.20	6.18	6.29	6.25
3	6.37	6.35	6.31	6.28	6.54	6.52	6.64	6.61	6.31	6.20	6.25	6.22
4	6.38	6.32	6.30	6.26	6.53	6.51	6.62	6.60	6.29	6.27	6.24	6.22
5	6.33	6.27	6.37	6.26	6.66	6.53	6.63	6.59	6.29	6.27	6.26	6.22
6	6.28	6.23	6.50	6.37	6.69	6.65	6.59	6.55	6.63	6.29	6.37	6.24
7	6.24	6.20	6.52	6.50	6.68	6.64	6.55	6.53	6.69	6.63	6.40	6.33
8	6.21	6.18	6.50	6.46	6.64	6.62	6.55	6.52	6.68	6.64	6.40	6.35
9	6.18	6.16	6.46	6.44	6.63	6.61	6.54	6.50	6.73	6.63	6.36	6.33
10	6.17	6.15	6.47	6.45	6.71	6.61	6.50	6.47	6.71	6.63	6.34	6.31
11	6.16	6.14	6.49	6.46	6.88	6.70	6.51	6.46	6.68	6.62	6.36	6.31
12	6.16	6.13	6.56	6.49	6.84	6.81	6.51	6.47	6.63	6.61	6.36	6.29
13	6.13	6.09	6.56	6.48	6.82	6.78	6.48	6.44	6.63	6.60	6.30	6.24
14	6.28	6.09	6.48	6.47	6.96	6.79	6.48	6.42	6.61	6.58	6.27	6.24
15	6.27	6.17	6.47	6.44	6.96	6.89	6.49	6.41	6.58	6.51	6.27	6.23
16	6.17	6.14	6.44	6.42	6.91	6.89	6.41	6.37	6.51	6.47	6.31	6.24
17	6.14	6.12	6.43	6.39	7.02	6.91	6.39	6.37	6.49	6.47	6.29	6.25
18	6.12	6.11	6.41	6.38	7.01	6.97	6.47	6.39	6.49	6.48	6.27	6.24
19	6.12	6.08	6.62	6.41	6.98	6.93	6.42	6.37	6.54	6.47	6.25	6.18
20	6.08	6.05	6.66	6.62	6.93	6.86	6.37	6.33	6.51	6.46	6.28	6.18
21	6.11	6.08	6.68	6.63	6.87	6.85	6.34	6.32	6.49	6.43	6.27	6.20
22	6.08	6.03	6.64	6.60	6.86	6.83	6.39	6.27	6.43	6.38	6.20	6.16
23	6.04	5.98	6.63	6.60	---	---	6.32	6.29	6.39	6.37	6.16	6.15
24	5.98	5.93	6.67	6.60	6.88	6.81	6.32	6.26	6.40	6.38	6.15	6.14
25	5.95	5.92	6.63	6.59	6.86	6.82	6.28	6.24	6.38	6.33	6.14	6.09
26	5.99	5.93	6.60	6.58	6.82	6.80	6.28	6.27	6.34	6.32	6.17	6.06
27	6.15	5.98	6.60	6.56	6.80	6.76	6.32	6.28	6.33	6.30	6.18	6.15
28	6.22	6.13	6.71	6.58	6.76	6.73	6.32	6.27	6.30	6.28	6.16	6.12
29	6.35	6.21	6.71	6.66	6.76	6.73	6.27	6.26	6.29	6.28	6.14	6.11
30	6.35	6.32	6.67	6.66	6.76	6.68	6.27	6.24	---	---	6.15	6.12
31	6.34	6.32	---	---	6.68	6.66	6.24	6.20	---	---	6.16	6.14
MONTH	6.45	5.92	6.71	6.26	7.02	6.51	6.67	6.20	6.73	6.18	6.40	6.06

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.26	6.16	---	---	---	---	5.59	5.55	6.04	6.01	5.85	5.81
2	6.27	6.23	---	---	---	---	5.56	5.54	6.03	6.00	5.83	5.80
3	6.30	6.26	---	---	---	---	5.55	5.52	6.03	6.00	5.82	5.79
4	6.34	6.28	---	---	---	---	5.83	5.52	6.01	5.96	5.81	5.76
5	6.28	6.24	---	---	5.81	5.71	5.87	5.82	6.01	5.96	5.79	5.76
6	6.24	6.23	---	---	5.81	5.79	5.87	5.84	5.97	5.91	5.80	5.75
7	6.25	6.23	---	---	5.81	5.77	5.88	5.83	5.92	5.87	5.84	5.77
8	6.23	6.21	---	---	5.79	5.75	5.89	5.85	5.88	5.84	5.86	5.78
9	6.22	6.17	---	---	5.77	5.74	5.86	5.81	5.84	5.81	5.85	5.74
10	6.17	6.15	---	---	5.75	5.71	5.81	5.79	5.82	5.80	5.78	5.71
11	6.16	6.13	---	---	5.77	5.70	5.79	5.76	5.84	5.78	5.74	5.70
12	6.26	6.13	---	---	5.79	5.75	5.78	5.76	6.04	5.83	5.73	5.68
13	6.35	6.26	---	---	5.77	5.74	5.78	5.75	6.12	6.04	5.72	5.68
14	6.38	6.34	---	---	5.77	5.73	5.76	5.73	6.17	6.11	5.72	5.67
15	6.34	6.30	---	---	5.74	5.69	5.75	5.67	6.17	6.16	5.75	5.69
16	6.31	6.29	---	---	5.70	5.68	5.69	5.63	6.18	6.14	5.89	5.73
17	6.33	6.29	---	---	5.72	5.67	5.65	5.62	6.15	6.13	5.89	5.74
18	6.31	6.29	---	---	5.76	5.71	---	---	6.14	6.10	5.92	5.86
19	6.31	6.29	---	---	5.77	5.74	---	---	---	---	5.88	5.85
20	6.29	6.26	---	---	5.74	5.72	---	---	---	---	5.88	5.84
21	6.27	6.26	---	---	5.73	5.70	---	---	---	---	5.88	5.83
22	---	---	---	---	5.73	5.70	---	---	6.06	6.02	5.85	5.79
23	---	---	---	---	5.73	5.71	---	---	6.05	5.97	5.81	5.77
24	---	---	---	---	5.74	5.70	---	---	6.01	5.94	5.80	5.77
25	---	---	---	---	5.73	5.70	---	---	5.97	5.93	5.80	5.76
26	---	---	---	---	5.73	5.68	---	---	5.96	5.92	5.79	5.75
27	---	---	---	---	5.68	5.65	---	---	5.95	5.91	5.97	5.75
28	---	---	---	---	5.66	5.63	6.04	5.90	5.94	5.89	6.01	5.77
29	---	---	---	---	5.63	5.59	6.06	6.04	5.92	5.88	---	---
30	---	---	---	---	5.60	5.57	6.06	6.03	5.90	5.84	---	---
31	---	---	---	---	---	---	6.06	6.02	5.88	5.83	---	---
MONTH	6.38	6.13	---	---	5.81	5.57	6.06	5.52	6.18	5.78	6.01	5.67
YEAR	7.02	5.52										

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

WELL NUMBER.--WE Cb 8. SITE ID.--385252076572801. PERMIT NUMBER.--DCMW002-04

LOCATION.--Lat 38°52'52.3", long 76°57'28.0", Hydrologic Unit 02070010, In Fort Dupont Park near the Activity Center. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Potomac Group Aquifer of lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 265 ft; casing diameter 4 in., to 255 ft; screen diameter 4 in., from 255 to 265 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 61 ft above North American Vertical Datum of 1988, from topographic map. Measuring point: Top of PVC casing, 0.67 ft above land surface.

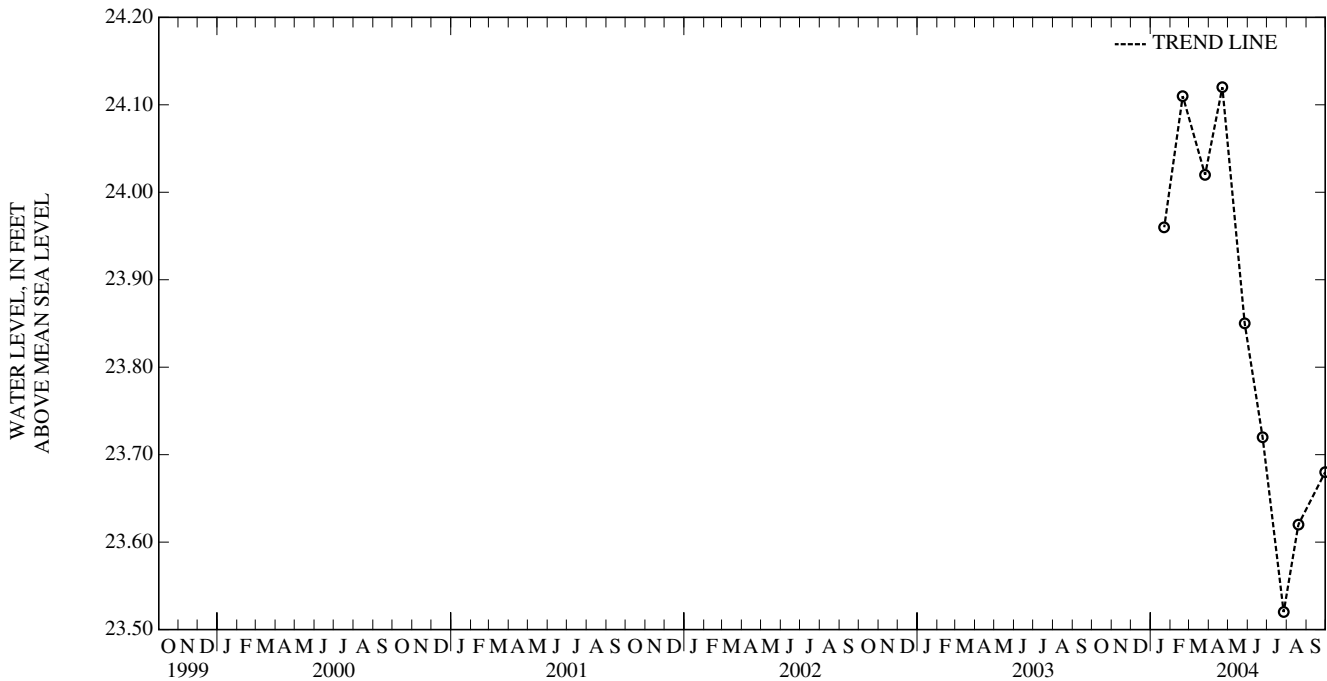
REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--January 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.12 ft above sea level, March 22, 2004; lowest measured, 23.52 ft above sea level, July 27, 2004.

WATER LEVELS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 2004	23.96	APR 22, 2004	24.12	JUL 27, 2004	23.52
FEB 20	24.11	MAY 27	23.85	AUG 19	23.62
MAR 26	24.02	JUN 24	23.72	SEP 30	23.68
LOWEST 23.52 JUL 27, 2004					
HIGHEST 24.12 APR 22, 2004					



5 YEAR HYDROGRAPH

OCTOBER 1, 1999 THROUGH SEPTEMBER 30, 2004

GROUND-WATER-QUALITY RECORDS

REMARK CODES

The following remark codes may appear with the water-quality data in this section:

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
E	Estimated value
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
V	Analyte was detected in both the environmental sample and the associated blank.
M	Presence of material verified but not quantified.

Dissolved Trace-Element Concentrations

NOTE--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols in water year 1994.

Change in National Trends Network Procedures

NOTE--Sample handling procedures at all national Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

QUALITY OF GROUND WATER DATA
NEW CASTLE COUNTY, DELAWARE

Well Number	Date	Time	Station number	Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
Cc53-08	03-03-04	1145	394036075373201	Environmental	217PTMC	GW	73	73	58
	03-03-04	1146		Replicate	217PTMC	GW	73	73	58
Cd31-19	02-02-04	1030	394224075340501	Blank	217PTMC	GW	75	--	--
	02-02-04	1230		Environmental	217PTMC	GW	74.50	75	72
	02-02-04	1235		Replicate	217PTMC	GW	74.50	75	72

	Date	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)
Cc53-08	03-03-04	--	66	--	28	4040	769	--	--	5.4	277
	03-03-04	--	66	--	28	4040	--	--	--	--	--
Cd31-19	02-02-04	--	68	--	--	4040	--	--	--	--	--
	02-02-04	51.85	68	.72	35	4040	776	5.3	51	4.1	150
	02-02-04	--	68	--	--	4040	--	--	--	--	--

	Date	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)
Cc53-08	03-03-04	15.0	14.9	100	20.4	12.6	2.07	7.14	7	9	.04
	03-03-04	--	--	--	--	--	--	--	--	--	--
Cd31-19	02-02-04	--	--	--	--	--	--	--	--	--	--
	02-02-04	1.0	14.0	42	9.49	4.39	1.60	10.7	16	19	.13
	02-02-04	--	--	--	--	--	--	--	--	--	--

	Date	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 water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
Cc53-08	03-03-04	24.9	<.2	11.0	25.1	167	171	<.04	13.3d	<.008	<.006
	03-03-04	--	--	--	--	--	--	--	--	--	--
Cd31-19	02-02-04	--	--	--	--	--	--	--	--	--	--
	02-02-04	18.7	<.2	13.1	10.1	93	94	<.04	3.44	<.008	<.006
	02-02-04	--	--	--	--	--	--	--	--	--	--

Geologic Unit (aquifer): 217PTMC - Potomac Group
Station Type: GW - Ground Water
Sampling Method: 4040 - Submersible pump

QUALITY OF GROUND WATER DATA
NEW CASTLE COUNTY, DELAWARE—Continued

Well Numbe	Date	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Ra-228, water, fltrd, pCi/L (81366)	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)	Uranium natural water, fltrd, ug/L (22703)
Cc53-08	03-03-04	--	--	5	21	180	E.04n
	<i>03-03-04</i>	--	--	--	--	--	--
<i>Cd31-19</i>	<i>02-02-04</i>	<i>.20</i>	<i><.1b</i>	--	--	--	<i><.04</i>
	02-02-04	E.04b	<.1b	M	20	160	.05
	<i>02-02-04</i>	--	--	--	20	150	--

Remark codes used in this table:

- < -- Less than
- E -- Estimated value
- M-- Presence verified, not quantified

Value qualifier codes used in this table:

- b -- Value extrapolated at low end
- d -- Diluted sample: method hi range exceeded
- k -- Counts outside acceptable range
- m-- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

SUSSEX COUNTY, DELAWARE

Well Number	Date	Time	Station number	Sample type	Station type	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)
Ph24-01	11-24-03	1600	383811075113001	Blank	GW	115.00	--	--	--
	11-24-03	1601		Blank	GW	115.00	--	--	--
	11-25-03	1115		Environmental	GW	115.00	--	4.4	--
Ph24-02	11-25-03	1116	383840075112001	Environmental	GW	115.00	--	--	--
	12-02-03	1330		Environmental	GW	120.00	--	5.7	--
Ph25-17	12-02-03	1331	383803075105301	Environmental	GW	120.00	--	--	--
	12-11-03	0945		Environmental	GW	68.00	--	6.1	--
	12-11-03	0946		Environmental	GW	68.00	--	--	--
Ph34-18	12-10-03	0930	383706075115901	Environmental	GW	80.00	--	7.8	--
	12-10-03	0931		Environmental	GW	80.00	--	--	--
Ph34-22	12-04-03	1000	383744075110701	Environmental	GW	79.00	--	6.0	--
	12-04-03	1001		Environmental	GW	79.00	--	--	--
Ph34-23	12-15-03	1500	383738075112301	Environmental	GW	70.00	--	7.8	--
	12-15-03	1501		Environmental	GW	70.00	--	--	--
Ph34-24	12-01-03	1330	383738075112201	Environmental	GW	70.00	--	2.9	--
	12-01-03	1331		Environmental	GW	70.00	--	--	--
Ph35-24	12-16-03	1330	383731075102001	Environmental	GW	57.00	12.54	5.3	--
	12-16-03	1331		Environmental	GW	57.00	12.54	--	--
	12-17-03	1446		Replicate	GW	57.00	12.54	--	--
Ph35-25	12-17-03	1445	383729075101601	Environmental	GW	58.00	10.30	4.1	--
	12-17-03	1446		Environmental	GW	58.00	10.30	--	--
Ph35-28	09-15-04	1300	383752075100601	Environmental	GW	58.00	10.30	--	--
	09-16-04	0930		Blank	GW	58.00	10.30	--	--
	09-16-04	1300		Environmental	GW	58.00	10.30	4.7	48
	12-16-03	0900		Environmental	GW	--	--	6.4	--
	12-16-03	0901		Environmental	GW	--	--	--	--
Ph35-30	09-16-04	1400	383729075101603	Environmental	GW	78.3	11.12	6.5	73
	09-16-04	1200		Environmental	GW	68.	10.94	6.4	70
Ph35-31	09-15-04	1945	383729075101605	Environmental	GW	60.3	10.88	2.3	24
Ph35-32	09-15-04	1730	383729075101606	Environmental	GW	46	10.73	1.8	20
Ph35-33	09-15-04	1445	383729075101607	Environmental	GW	25	10.72	2.7	28
Ph44-07	12-09-03	0915	383657075110201	Environmental	GW	65.00	--	8.5	--
Pi31-01	12-09-03	0916	383739075093101	Environmental	GW	65.00	--	--	--
	12-10-03	1230		Environmental	GW	66.00	13.86	3.5	--
	12-10-03	1231		Environmental	GW	66.00	13.86	--	--
	12-10-03	1345		Replicate	GW	66.00	13.86	--	--
	12-10-03	1346		Replicate	GW	66.00	13.86	--	--
	02-11-04	1530		Environmental	GW	66.00	13.86	3.7	--
	02-11-04	1615		Environmental	GW	66.00	13.86	3.7	--
	02-11-04	1830		Environmental	GW	66.00	13.86	3.7	--
	02-12-04	1730		Environmental	GW	66.00	13.86	3.7	--
	09-13-04	1000		Environmental	GW	66.00	13.86	4.0	40

Station Type: GW - Ground Water

QUALITY OF GROUND WATER DATA
SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Bromide water, fltrd, mg/L (71870)	Chlor-ide, water, fltrd, mg/L (00940)
Ph24-01	11-24-03	--	--	--	--	--	--	--	--	--	--
	11-24-03	--	--	--	--	.02	.013	<.16	E.08n	<.02	<.20
Ph24-02	11-25-03	5.9	94	14.7	--	--	--	--	--	--	--
	11-25-03	--	--	--	21	5.69	1.62	1.25	9.30	.04	10.8
Ph25-17	12-02-03	5.8	140	14.5	--	--	--	--	--	--	--
	12-02-03	--	--	--	34	8.88	2.98	1.58	9.38	<.02	12.1
Ph34-18	12-11-03	5.4	119	13.3	--	--	--	--	--	--	--
	12-11-03	--	--	--	19	3.79	2.26	1.79	12.8	.05	20.6
Ph34-22	12-10-03	5.1	116	13.7	--	--	--	--	--	--	--
	12-10-03	--	--	--	28	6.28	2.86	3.27	5.63	.04	14.1
Ph34-23	12-04-03	5.7	87	14.1	--	--	--	--	--	--	--
	12-04-03	--	--	--	12	3.07	1.08	1.36	11.3	.06	11.7
Ph34-24	12-15-03	5.3	121	13.7	--	--	--	--	--	--	--
	12-15-03	--	--	--	24	5.08	2.63	2.04	10.7	.06	13.5
Ph35-24	12-01-03	5.5	157	14.4	--	--	--	--	--	--	--
	12-01-03	--	--	--	24	5.64	2.50	2.30	17.6	.07	19.5
Ph35-25	12-16-03	5.5	119	14.7	--	--	--	--	--	--	--
	12-16-03	--	--	--	16	4.01	1.45	1.54	13.5	.07	12.6
Ph35-28	12-17-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	5.7	77	14.7	--	--	--	--	--	--	--
Ph35-30	09-15-04	--	--	--	9	2.31	.811	1.18	10.0	.13	9.83
	09-15-04	--	--	--	11	2.54	1.01	1.21	9.75	.14	10.3
Ph35-31	09-16-04	--	--	--	--	.03	<.008	<.16	.10	<.02	<.20
	09-16-04	5.5	81	15.7	--	--	--	--	--	--	--
Ph35-32	12-16-03	5.5	149	14.6	--	--	--	--	--	--	--
	12-16-03	--	--	--	33	7.68	3.27	2.04	12.0	.04	16.9
Ph35-33	09-16-04	5.6	105	20.8	15	3.78	1.37	1.23	11.7	.06	10.5
	09-16-04	5.6	97	19.1	13	3.40	1.16	1.25	11.3	.06	10.5
Ph35-34	09-15-04	5.7	64	16.7	7	1.67	.614	1.04	8.42	.11	9.85
	09-15-04	5.5	73	21.0	9	1.31	1.29	1.59	9.22	.29d	11.1
Ph44-07	09-15-04	5.2	125	17.8	29	3.25	5.02	2.29	9.01	.03	17.6
	12-09-03	5.3	275	13.3	--	--	--	--	--	--	--
Pi31-01	12-09-03	--	--	--	24	3.65	3.67	2.89	33.2	.06	66.1
	12-10-03	5.2	142	14.0	--	--	--	--	--	--	--
Pi31-01	12-10-03	--	--	--	22	2.92	3.46	2.14	15.2	.31d	21.0
	12-10-03	--	--	--	--	--	--	--	--	--	--
Pi31-01	12-10-03	--	--	--	22	3.06	3.47	2.12	15.1	.31d	21.1
	02-11-04	5.3	136	13.9	23	3.13	3.70	2.29	15.2	.29d	20.8
Pi31-01	02-11-04	5.3	137	13.9	23	3.17	3.74	2.21	15.3	.33d	20.7
	02-11-04	5.3	136	13.9	23	3.13	3.69	2.26	15.2	.32d	21.1
Pi31-01	02-12-04	5.4	135	13.9	24	3.26	3.82	2.26	15.7	.30d	21.1
	09-13-04	5.1	147	15.0	24	3.25	3.86	2.09	15.0	.28d	21.8

QUALITY OF GROUND WATER DATA
 SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)
Ph24-01	11-24-03	--	--	--	--	--	<.06	<.008	<.3	--	--
	11-24-03	<.2	<i>E.03n</i>	<.2	--	<10	--	--	--	<2	<.2
	11-25-03	--	--	--	--	--	1.89	<.008	E.3n	--	--
Ph24-02	11-25-03	<.2	23.1	7.5	--	73	--	--	--	<2	51
	12-02-03	--	--	--	--	--	4.83	<.008	E.3n	--	--
Ph25-17	12-02-03	<.2	19.4	16.1	--	98	--	--	--	<2	53
	12-11-03	--	--	--	--	--	.73	<.008	.4	--	--
Ph34-18	12-11-03	<.2	16.7	6.6	--	73	--	--	--	<2	68
	12-10-03	--	--	--	--	--	5.74d	<.008	E.3n	--	--
Ph34-22	12-10-03	<.2	12.2	.3	--	74	--	--	--	<2	182
	12-04-03	--	--	--	--	--	1.32	<.008	E.3n	--	--
Ph34-23	12-04-03	<.2	21.3	2.1	--	68	--	--	--	<2	48
	12-15-03	--	--	--	--	--	12.3d	<.008	E.3n	--	--
Ph34-24	12-15-03	<.2	18.5	.6	--	86	--	--	--	<2	59
	12-01-03	--	--	--	--	--	5.32d	<.008	.4	--	--
Ph35-24	12-01-03	<.2	17.2	2.6	--	104	--	--	--	<2	98
	12-16-03	--	--	--	--	--	5.25d	<.008	E.3n	--	--
Ph35-25	12-16-03	<.2	19.8	1.5	--	76	--	--	--	<2	68
	12-17-03	--	--	--	--	--	--	--	--	--	--
Ph35-28	12-17-03	--	--	--	--	--	2.07	<.008	E.3n	--	--
	12-17-03	<.2	18.8	1.6	--	65	--	--	--	<2	35
Ph35-30	09-15-04	<.2	18.3	1.5	--	67	2.40	<.008	E.3n	--	--
	09-16-04	<.2	.04	<i>E.1n</i>	--	<10	<.06	<.008	<.3	--	--
	09-16-04	--	--	--	--	--	--	--	--	--	--
	12-16-03	--	--	--	--	--	4.13	<.008	.4	--	--
Ph35-31	12-16-03	<.2	20.2	13.1	--	97	--	--	--	<2	86
	09-16-04	<.2	21.1	.6	78	85	5.39d	<.008	<.3	--	--
Ph35-32	09-16-04	<.2	19.6	.8	71	76	4.22	<.008	E.2n	--	--
Ph35-33	09-15-04	<.2	16.9	1.3	48	53	.67	<.008	E.2n	--	--
Ph35-34	09-15-04	<.2	12.3	2.7	47	49	.78	<.008	.5	--	--
Ph44-07	09-15-04	<.2	11.4	13.3	69	72	.58	<.008	.7	--	--
	12-09-03	--	--	--	--	--	.49	<.008	E.3n	--	--
Pi31-01	12-09-03	<.2	11.6	.8	--	131	--	--	--	<2	299
	12-10-03	--	--	--	--	--	1.52	<.008	1.2	--	--
	12-10-03	<.2	16.0	8.7	--	81	--	--	--	<2	101
	12-10-03	--	--	--	--	--	1.49	<.008	1.2	--	--
	12-10-03	<.2	16.1	8.8	--	84	--	--	--	<2	100
	02-11-04	<.2	15.0	8.0	83	94	1.52	<.008	1.5	--	102
	02-11-04	<.2	15.0	8.7	84	88	1.53	<.008	1.4	--	103
	02-11-04	<.2	15.0	7.9	83	94	1.54	<.008	1.4	--	103
	02-12-04	<.2	14.9	7.8	84	91	1.55	<.008	1.4	--	102
09-13-04	<.2	15.2	7.9	84	89	1.74	<.008	1.7	--	--	

QUALITY OF GROUND WATER DATA
SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Molybdenum, water, fltrd, ug/L (01060)
Ph24-01	11-24-03	--	--	--	--	--	--	--	--	--	--
	11-24-03	<8	<.04	<.8	<.4	<6	--	<.08	<.8	--	<.4
	11-25-03	--	--	--	--	--	--	--	--	--	--
Ph24-02	11-25-03	11	.05	.9	5.1	E4n	--	3.45	.8	--	<.4
	12-02-03	--	--	--	--	--	--	--	--	--	--
Ph25-17	12-02-03	8	.05	8.1	21.3	E3n	--	6.71	.9	--	<.4
	12-11-03	--	--	--	--	--	--	--	--	--	--
Ph34-18	12-11-03	11	E.03n	E.7n	2.0	<6	--	.76	2.4	--	<.4
	12-10-03	--	--	--	--	--	--	--	--	--	--
Ph34-22	12-10-03	9	.12	<.8	4.3	<6	--	1.54	6.9	--	<.4
	12-04-03	--	--	--	--	--	--	--	--	--	--
Ph34-23	12-04-03	10	.04	E.7n	7.3	<6	--	1.15	.9	--	<.4
	12-15-03	--	--	--	--	--	--	--	--	--	--
Ph34-24	12-15-03	8	.05	<.8	1.6	<6	--	.09	2.8	--	<.4
	12-01-03	--	--	--	--	--	--	--	--	--	--
Ph35-24	12-01-03	9	.04	E.7n	1.8	<6	--	.68	1.2	--	<.4
	12-16-03	--	--	--	--	--	--	--	--	--	--
	12-16-03	8	E.03n	<.8	2.6	7	--	1.55	3.0	--	<.4
Ph35-25	12-17-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	E8n	E.02n	E.5n	2.2	E5n	--	.43	9.4	--	<.4
Ph35-28	09-15-04	--	--	--	--	<6	--	--	11.2	--	--
	09-16-04	--	--	--	--	E3n	--	--	<.8	--	--
	09-16-04	--	--	--	--	--	--	--	--	--	--
	12-16-03	--	--	--	--	--	--	--	--	--	--
	12-16-03	9	.07	.9	1.6	11	--	.42	3.5	--	<.4
Ph35-30	09-16-04	--	--	--	--	<6	--	--	1.4	--	--
	09-16-04	--	--	--	--	<6	--	--	E.5n	--	--
Ph35-31	09-15-04	--	--	--	--	E5n	--	12.0	--	--	
Ph35-32	09-15-04	--	--	--	--	9	--	23.2	--	--	
Ph35-33	09-15-04	--	--	--	--	269	--	19.3	--	--	
Ph35-34	09-15-04	--	--	--	--	--	--	--	--	--	
Ph44-07	12-09-03	--	--	--	--	--	--	--	--	--	
Pi31-01	12-09-03	14	.11	<.8	3.0	<6	--	.30	11.6	--	<.4
	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	11	.07	<.8	3.7	10	--	.99	51.8	--	<.4
	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	11	.07	<.8	3.6	8	--	.92	52.1	--	<.4
	02-11-04	--	--	--	--	15	70	.59	53.4	55.5	--
	02-11-04	--	--	--	--	11	M	.48	52.5	54.2	--
	02-11-04	--	--	--	--	8	Mn	.33	52.1	53.2	--
	02-12-04	--	--	--	--	8	Mn	1.10	52.2	53.2	--
	09-13-04	--	--	--	--	7	--	--	55.1	--	--

QUALITY OF GROUND WATER DATA

SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Zinc, water, fltrd, ug/L (01090)	1,1,1,2-Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)
Ph24-01	11-24-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
	11-24-03	<.06	<.4	E.6n	--	--	--	--	--	--	--
	11-25-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph24-02	11-25-03	1.06	.5	4.3	--	--	--	--	--	--	--
	12-02-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph25-17	12-02-03	4.38	.7	33.2	--	--	--	--	--	--	--
	12-11-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph34-18	12-11-03	.33	.7	3.1	--	--	--	--	--	--	--
	12-10-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph34-22	12-10-03	1.60	<.4	12.0	--	--	--	--	--	--	--
	12-04-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph34-23	12-04-03	.45	E.2n	3.2	--	--	--	--	--	--	--
	12-15-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph34-24	12-15-03	.23	<.4	.8	--	--	--	--	--	--	--
	12-01-03	--	--	--	<.03b	E.08b	<.16	<.04b	<.06b	E.04b	<.02b
Ph35-24	12-01-03	.70	E.2n	13.8	--	--	--	--	--	--	--
	12-16-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph35-25	12-16-03	.47	<.4	6.4	--	--	--	--	--	--	--
	12-17-03	--	--	--	--	--	--	--	--	--	--
Ph35-28	12-17-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
	12-17-03	.31	<.4	3.8	--	--	--	--	--	--	--
Ph35-30	09-15-04	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
	09-16-04	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph35-31	09-16-04	--	--	--	--	--	--	--	--	--	--
	12-16-03	1.25	.8	7.7	--	--	--	--	--	--	--
Ph35-32	09-16-04	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
	09-15-04	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph35-33	09-15-04	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
	09-15-04	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Ph44-07	09-15-04	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
	12-09-03	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b
Pi31-01	12-09-03	1.09	E.3n	16.4	--	--	--	--	--	--	--
	12-10-03	--	--	--	<.03b	E.01t	<.16	<.04b	<.06b	<.04b	<.02b
Ph35-34	12-10-03	.65	.6	13.5	--	--	--	--	--	--	--
	12-10-03	--	--	--	<.03b	E.01t	<.16	<.04b	<.06b	<.04b	<.02b
Ph35-34	12-10-03	.63	.6	13.5	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
Ph35-34	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
Ph35-34	02-12-04	--	--	--	--	--	--	--	--	--	--
	09-13-04	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b

QUALITY OF GROUND WATER DATA
SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	1,1-Di-chloro-propene water unfltrd ug/L (77168)	1,2,3,4 Tetra-methyl-benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000)	1,2,3-Tri-chloro-benzene water unfltrd ug/L (77613)	1,2,3-Tri-chloro-propane water unfltrd ug/L (77443)	1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)	1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)	1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)	Dibromo-chloro-propane water unfltrd ug/L (82625)	1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)
Ph24-01	11-24-03	<.03b	<.1b	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	11-24-03	--	--	--	--	--	--	--	--	--	--
	11-25-03	<.03b	<.1b	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph24-02	11-25-03	--	--	--	--	--	--	--	--	--	--
	12-02-03	<.03b	<.1b	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph25-17	12-02-03	--	--	--	--	--	--	--	--	--	--
	12-11-03	<.03b	<.1b	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph34-18	12-10-03	<.03b	<.1b	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	12-10-03	--	--	--	--	--	--	--	--	--	--
Ph34-22	12-04-03	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	12-04-03	--	--	--	--	--	--	--	--	--	--
Ph34-23	12-15-03	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	12-15-03	--	--	--	--	--	--	--	--	--	--
Ph34-24	12-01-03	<.03b	<.1b	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	12-01-03	--	--	--	--	--	--	--	--	--	--
Ph35-24	12-16-03	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	12-16-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	--	--	--	--	--	--	--	--	--	--
Ph35-25	12-17-03	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	12-17-03	--	--	--	--	--	--	--	--	--	--
	09-15-04	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph35-28	09-16-04	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	09-16-04	--	--	--	--	--	--	--	--	--	--
	12-16-03	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph35-30	12-16-03	--	--	--	--	--	--	--	--	--	--
	09-16-04	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph35-31	09-16-04	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph35-32	09-15-04	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph35-33	09-15-04	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph35-34	09-15-04	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Ph44-07	12-09-03	<.03b	<.1b	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
Pi31-01	12-09-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.03b	<.1b	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.03b	<.1b	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b
	12-10-03	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-12-04	--	--	--	--	--	--	--	--	--	--
	09-13-04	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b

QUALITY OF GROUND WATER DATA
 SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-ethane-d4, sur Sch2090 wat unfltrd pct rcv (99832)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3,5-Tri-methyl-benzene water unfltrd ug/L (77226)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,3-Di-chloro-propane water unfltrd ug/L (77173)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	14Bromo-fluoro-benzene surrog. VOC Sch wat unfltrd pct rcv (99834)	2,2-Di-chloro-propane water unfltrd ug/L (77170)
Ph24-01	11-24-03	<.05b	<.1	133	<.03b	<.04b	<.03b	<.1b	<.03b	95.5	<.05b
	11-24-03	--	--	--	--	--	--	--	--	--	--
	11-25-03	<.05b	<.1	135	<.03b	<.04b	<.03b	<.1b	<.03b	89.5	<.05b
Ph24-02	11-25-03	--	--	--	--	--	--	--	--	--	--
	12-02-03	<.05b	<.1	141	<.03b	<.04b	<.03b	<.1b	<.03b	91.7	<.05b
Ph25-17	12-02-03	--	--	--	--	--	--	--	--	--	--
	12-11-03	<.05b	<.1	137	<.03b	<.04b	<.03b	<.1b	E.05b	71.4	<.05b
Ph34-18	12-11-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.05b	<.1	135	<.03b	<.04b	<.03b	<.1b	<.03b	74.1	<.05b
Ph34-22	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-04-03	<.05b	<.1	107	<.03b	<.04b	<.03b	<.1b	<.03b	82.7	<.05b
Ph34-23	12-04-03	--	--	--	--	--	--	--	--	--	--
	12-15-03	<.05b	<.1	111	<.03b	<.04b	<.03b	<.1b	<.03b	84.4	<.05b
Ph34-24	12-15-03	--	--	--	--	--	--	--	--	--	--
	12-01-03	<.05b	<.1	142	<.03b	<.04b	<.03b	<.1b	<.03b	84.3	<.05b
Ph35-24	12-01-03	--	--	--	--	--	--	--	--	--	--
	12-16-03	<.05b	<.1	106	<.03b	<.04b	<.03b	<.1b	<.03b	81.0	<.05b
Ph35-25	12-16-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	<.05b	<.1	110	<.03b	<.04b	<.03b	<.1b	<.03b	74.7	<.05b
Ph35-28	12-17-03	--	--	--	--	--	--	--	--	--	--
	09-15-04	<.05b	<.1	119	<.03b	<.04b	<.03b	<.1b	<.03b	70.6	<.05b
	09-16-04	<.05b	<.1	111	<.03b	<.04b	<.03b	<.1b	<.03b	74.0	<.05b
	12-16-03	<.05b	<.1	108	<.03b	<.04b	<.03b	<.1b	<.03b	84.5	<.05b
Ph35-30	12-16-03	--	--	--	--	--	--	--	--	--	--
	09-16-04	<.05b	<.1	116	<.03b	<.04b	<.03b	<.1b	<.03b	70.8	<.05b
Ph35-31	09-16-04	<.05b	<.1	118	<.03b	<.04b	<.03b	<.1b	<.03b	71.3	<.05b
Ph35-32	09-15-04	<.05b	<.1	120	<.03b	<.04b	<.03b	<.1b	<.03b	70.9	<.05b
Ph35-33	09-15-04	<.05b	<.1	122	<.03b	<.04b	<.03b	<.1b	<.03b	71.5	<.05b
Ph35-34	09-15-04	<.05b	<.1	119	<.03b	<.04b	<.03b	<.1b	<.03b	71.8	<.05b
Ph44-07	12-09-03	<.05b	<.1	129	<.03b	<.04b	<.03b	<.1b	<.03b	73.4	<.05b
Pi31-01	12-09-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.05b	<.1	134	<.03b	<.04b	<.03b	<.1b	<.03b	71.5	<.05b
	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.05b	<.1	136	<.03b	<.04b	<.03b	<.1b	<.03b	71.2	<.05b
	12-10-03	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
02-12-04	--	--	--	--	--	--	--	--	--	--	
09-13-04	<.05b	<.1	117	<.03b	<.04b	<.03b	<.1b	<.03b	74.7	<.05b	

QUALITY OF GROUND WATER DATA
 SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromo- ethene, water, unfltrd ug/L (50002)	Bromo- methane water unfltrd ug/L (34413)	Carbon di- sulfide water unfltrd ug/L (77041)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)
Ph24-01	11-24-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
	11-24-03	--	--	--	--	--	--	--	--	--	--
	11-25-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph24-02	11-25-03	--	--	--	--	--	--	--	--	--	--
	12-02-03	7.17	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	4.9
Ph25-17	12-02-03	--	--	--	--	--	--	--	--	--	--
	12-11-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph34-18	12-11-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph34-22	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-04-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph34-23	12-04-03	--	--	--	--	--	--	--	--	--	--
	12-15-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph34-24	12-15-03	--	--	--	--	--	--	--	--	--	--
	12-01-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph35-24	12-01-03	--	--	--	--	--	--	--	--	--	--
	12-16-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
	12-16-03	--	--	--	--	--	--	--	--	--	--
Ph35-25	12-17-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph35-28	12-17-03	--	--	--	--	--	--	--	--	--	--
	09-15-04	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
	09-16-04	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
	09-16-04	--	--	--	--	--	--	--	--	--	--
Ph35-30	12-16-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
	09-16-04	--	--	--	--	--	--	--	--	--	--
Ph35-31	09-16-04	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph35-32	09-15-04	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph35-33	09-15-04	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph35-34	09-15-04	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Ph44-07	12-09-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
Pi31-01	12-09-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1
	12-10-03	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
02-12-04	--	--	--	--	--	--	--	--	--	--	
09-13-04	<.03b	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b	<.05b	<.1	

QUALITY OF GROUND WATER DATA
SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Di-bromo-methane water unfltrd ug/L (30217)	Di-chloro-di-fluoro-methane wat unfltrd ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl methacrylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethyl-benzene water unfltrd ug/L (34371)	Hexa-chloro-butadiene, water, unfltrd ug/L (39702)	Hexa-chloro-ethane, water, unfltrd ug/L (34396)
Ph24-01	11-24-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
	11-24-03	--	--	--	--	--	--	--	--	--	--
	11-25-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph24-02	11-25-03	--	--	--	--	--	--	--	--	--	--
	12-02-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph25-17	12-02-03	--	--	--	--	--	--	--	--	--	--
	12-11-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph34-18	12-11-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph34-22	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-04-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2b	<4.0	<.03b	<.1	<.1
Ph34-23	12-04-03	--	--	--	--	--	--	--	--	--	--
	12-15-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph34-24	12-15-03	--	--	--	--	--	--	--	--	--	--
	12-01-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph35-24	12-01-03	--	--	--	--	--	--	--	--	--	--
	12-16-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
	12-16-03	--	--	--	--	--	--	--	--	--	--
Ph35-25	12-17-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph35-28	12-17-03	--	--	--	--	--	--	--	--	--	--
	09-15-04	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
	09-16-04	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
	09-16-04	--	--	--	--	--	--	--	--	--	--
Ph35-30	12-16-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
	09-16-04	--	--	--	--	--	--	--	--	--	--
Ph35-31	09-16-04	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph35-32	09-15-04	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph35-33	09-15-04	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Ph35-34	09-15-04	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	E.03b	<.1	<.1
Ph44-07	12-09-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
Pi31-01	12-09-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
	12-10-03	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-12-04	--	--	--	--	--	--	--	--	--	--
	09-13-04	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1

QUALITY OF GROUND WATER DATA

SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Iodo-methane water unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta-+ para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)
Ph24-01	11-24-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
	11-24-03	--	--	--	--	--	--	--	--	--	--
	11-25-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph24-02	11-25-03	--	--	--	--	--	--	--	--	--	--
	12-02-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph25-17	12-02-03	--	--	--	--	--	--	--	--	--	--
	12-11-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph34-18	12-11-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph34-22	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-04-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph34-23	12-04-03	--	--	--	--	--	--	--	--	--	--
	12-15-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph34-24	12-15-03	--	--	--	--	--	--	--	--	--	--
	12-01-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph35-24	12-01-03	--	--	--	--	--	--	--	--	--	--
	12-16-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
	12-16-03	--	--	--	--	--	--	--	--	--	--
Ph35-25	12-17-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph35-28	12-17-03	--	--	--	--	--	--	--	--	--	--
	09-15-04	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
	09-16-04	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
	09-16-04	--	--	--	--	--	--	--	--	--	--
Ph35-30	12-16-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
	09-16-04	--	--	--	--	--	--	--	--	--	--
Ph35-31	09-16-04	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph35-32	09-15-04	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph35-33	09-15-04	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph35-34	09-15-04	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Ph44-07	12-09-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
Pi31-01	12-09-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b
	12-10-03	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
02-12-04	--	--	--	--	--	--	--	--	--	--	
09-13-04	<.35m	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	

QUALITY OF GROUND WATER DATA
SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)
Ph24-01	11-24-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
	11-24-03	--	--	--	--	--	--	--	--	--	--
	11-25-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
Ph24-02	11-25-03	--	--	--	--	--	--	--	--	--	--
	12-02-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
Ph25-17	12-02-03	--	--	--	--	--	--	--	--	--	--
	12-11-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
	12-11-03	--	--	--	--	--	--	--	--	--	--
Ph34-18	12-10-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
	12-10-03	--	--	--	--	--	--	--	--	--	--
Ph34-22	12-04-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	.2	<.06b	<.06b	<.06b
Ph34-23	12-04-03	--	--	--	--	--	--	--	--	--	--
	12-15-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
Ph34-24	12-15-03	--	--	--	--	--	--	--	--	--	--
	12-01-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	.6	<.06b	.10	<.06b
Ph35-24	12-01-03	--	--	--	--	--	--	--	--	--	--
	12-16-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
	12-16-03	--	--	--	--	--	--	--	--	--	--
Ph35-25	12-17-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
	12-17-03	--	--	--	--	--	--	--	--	--	--
Ph35-28	09-15-04	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
	09-16-04	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
	09-16-04	--	--	--	--	--	--	--	--	--	--
	12-16-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	.4	<.06b	<.06b	<.06b
Ph35-30	12-16-03	--	--	--	--	--	--	--	--	--	--
	09-16-04	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
Ph35-31	09-16-04	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
Ph35-32	09-15-04	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
Ph35-33	09-15-04	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
Ph35-34	09-15-04	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
Ph44-07	12-09-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	<.06b	<.06b
Pi31-01	12-09-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	E.07b	<.06b
	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	E.07b	<.06b
	12-10-03	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
02-12-04	--	--	--	--	--	--	--	--	--	--	
	09-13-04	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	E.02t	<.06b

QUALITY OF GROUND WATER DATA

SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Tetrahydrofuran, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	trans-1,3-Dichloropropene water unfltrd ug/L (34699)	trans-1,4-Dichloro-2-butene, wat unf ug/L (73547)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)
Ph24-01	11-24-03	<2	<i>E.01t</i>	105	<.03b	<.09b	<.7b	<.10	<.04b	<.16	<.02b
	11-24-03	--	--	--	--	--	--	--	--	--	--
	11-25-03	<2	<.05b	102	<.03b	<.09b	<.7b	<.10	<.04b	<.16	E.08b
Ph24-02	11-25-03	--	--	--	--	--	--	--	--	--	--
	12-02-03	<2	<.05b	104	<.03b	<.09b	<.7b	1.95	<.04b	<.16	8.18
Ph25-17	12-02-03	--	--	--	--	--	--	--	--	--	--
	12-11-03	<2	<.05b	94.1	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.46
Ph34-18	12-11-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<2	<.05b	95.0	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.13
Ph34-22	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-04-03	<2	<.05b	90.8	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.11
Ph34-23	12-04-03	--	--	--	--	--	--	--	--	--	--
	12-15-03	<2	<.05b	97.3	<.03b	<.09b	<.7b	<.10	<.04b	<.16	E.06b
Ph34-24	12-15-03	--	--	--	--	--	--	--	--	--	--
	12-01-03	<2	<.05b	102	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.31
Ph35-24	12-01-03	--	--	--	--	--	--	--	--	--	--
	12-16-03	<2	<.05b	94.8	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.34
Ph35-25	12-16-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	<2	<.05b	94.4	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.34
Ph35-28	12-17-03	--	--	--	--	--	--	--	--	--	--
	09-15-04	<2	<.05b	99.2	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.31
	09-16-04	<2	<.05b	96.3	<.03b	<.09b	<.7b	<.10	<.04b	<.16	<.02b
	12-16-03	<2	<.05b	96.9	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.65
Ph35-30	12-16-03	--	--	--	--	--	--	--	--	--	--
	09-16-04	<2	<.05b	100	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.20
Ph35-31	09-16-04	<2	<.05b	99.3	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.77
Ph35-32	09-15-04	<2	<.05b	100	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.50
Ph35-33	09-15-04	<2	<.05b	99.2	<.03b	<.09b	<.7b	<.10	<.04b	<.16	E.08b
Ph35-34	09-15-04	<2	1.01	98.3	<.03b	<.09b	<.7b	<.10	<.04b	<.16	.38
Ph44-07	12-09-03	<2	<.05b	93.8	<.03b	<.09b	<.7b	<.10	<.04b	<.16	2.15
Pi31-01	12-09-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<2	<.05b	97.6	<.03b	<.09b	<.7b	<.10	.40	<.16	1.71
	12-10-03	--	--	--	--	--	--	--	--	--	--
	12-10-03	<2	<.05b	95.8	<.03b	<.09b	<.7b	<.10	.39	<.16	1.71
	12-10-03	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-11-04	--	--	--	--	--	--	--	--	--	--
02-11-04	02-11-04	--	--	--	--	--	--	--	--	--	--
	02-12-04	--	--	--	--	--	--	--	--	--	--
	09-13-04	<2	<.05b	99.8	<.03b	<.09b	<.7b	<.10	.23	<.16	.91

QUALITY OF GROUND WATER DATA
SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Vinyl chlor- ide, water, unfltrd ug/L (39175)
Ph24-01	11-24-03	<.1b
	11-24-03	--
	11-25-03	<.1b
Ph24-02	11-25-03	--
	12-02-03	<.1b
	12-02-03	--
Ph25-17	12-11-03	<.1b
	12-11-03	--
	12-10-03	<.1b
Ph34-18	12-10-03	<.1b
	12-10-03	--
Ph34-22	12-04-03	<.1b
	12-04-03	--
Ph34-23	12-15-03	<.1b
	12-15-03	--
Ph34-24	12-01-03	<.1b
	12-01-03	--
Ph35-24	12-16-03	<.1b
	12-16-03	--
	12-17-03	--
Ph35-25	12-17-03	<.1b
	12-17-03	--
	09-15-04	<.1b
Ph35-28	09-16-04	<.1b
	09-16-04	--
	12-16-03	<.1b
	12-16-03	--
Ph35-30	09-16-04	<.1b
	09-16-04	<.1b
Ph35-31	09-16-04	<.1b
Ph35-32	09-15-04	<.1b
Ph35-33	09-15-04	<.1b
Ph35-34	09-15-04	<.1b
Ph44-07	12-09-03	<.1b
Pi31-01	12-09-03	--
	12-10-03	<.1b
	12-10-03	--
	12-10-03	<.1b
	12-10-03	--
	02-11-04	--
	02-11-04	--
	02-11-04	--
	02-12-04	--
	09-13-04	<.1b

QUALITY OF GROUND WATER DATA
 SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Time	Station number	Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Dis-solved oxygen, mg/L (00300)
Pi31-02	12-09-03	1315	383736075092801	Environmental	112CLMB	GW	70	17.32	8.0
	12-09-03	1316		Environmental	112CLMB	GW	70	17.32	--
Pi31-05	12-04-03	1330	383725075091701	Environmental	--	GW	85	18.17	7.6
	12-04-03	1331		Environmental	--	GW	85	18.17	--
Pi31-11	12-11-03	1315	383745075093301	Environmental	--	GW	93	15.47	3.8
	12-11-03	1316		Environmental	--	GW	93	15.47	--
<i>Pi31-12</i>	<i>12-17-03</i>	<i>1009</i>	<i>383748075093001</i>	<i>Blank</i>	--	<i>GW</i>	<i>84</i>	<i>15.08</i>	--
	<i>12-17-03</i>	<i>1010</i>		<i>Blank</i>	--	<i>GW</i>	<i>84</i>	<i>15.08</i>	--
	12-17-03	1145		Environmental	--	GW	84	15.08	6.2
	12-17-03	1146		Environmental	--	GW	84	15.08	--
<i>Pi31-13</i>	<i>02-12-04</i>	<i>1030</i>	<i>383740075093303</i>	<i>Blank</i>	--	<i>GW</i>	<i>72</i>	<i>13.93</i>	--
	02-12-04	1350		Environmental	--	GW	72	13.93	.2
	02-12-04	1500		Environmental	--	GW	72	13.93	.1
	02-12-04	1610		Environmental	--	GW	72	13.93	.1
Pi31-16	09-14-04	1610	383739075093103	Environmental	--	GW	80	13.96	1.7
Pi31-17	09-14-04	1330	383739075093104	Environmental	--	GW	70	13.66	1.5
Pi31-18	09-14-04	1140	383739075093105	Environmental	--	GW	62	13.77	3.1
Pi31-19	09-14-04	1000	383739075093106	Environmental	--	GW	55	13.63	4.9
Pi31-20	09-13-04	1740	383739075093107	Environmental	--	GW	48	13.71	5.0
Pi31-21	09-13-04	1910	383739075093108	Environmental	--	GW	25.5	13.77	5.2
Pi32-14	12-08-03	1530	383720075080301	Environmental	--	GW	53	--	6.6
	12-08-03	1531		Environmental	--	GW	53	--	--
Pi32-15	11-26-03	1015	383713075085501	Environmental	--	GW	90	9.28	7.6
	11-26-03	1016		Environmental	--	GW	90	9.28	--
Pi34-09	12-03-03	0945	383733075061101	Environmental	--	GW	35	--	4.0
	12-03-03	0946		Environmental	--	GW	35	--	--
Pi41-02	12-15-03	1115	383649075090701	Environmental	--	GW	85	8.30	5.9
	12-15-03	1116		Environmental	--	GW	85	8.30	--
Pi41-03	11-26-03	1430	383653075090601	Environmental	--	GW	89	8.80	4.0
	11-26-03	1431		Environmental	--	GW	89	8.80	--
Pi43-03	12-03-03	1415	383648075075601	Environmental	--	GW	48	--	5.1
	12-03-03	1416		Environmental	--	GW	48	--	--

Geologic Unit (aquifer): 112CLMB - Columbia aquifer

Station Type: GW - Ground Water

QUALITY OF GROUND WATER DATA
SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Bromide water, fltrd, mg/L (71870)
Pi31-02	12-09-03	--	5.4	144	13.7	--	--	--	--	--	--
	12-09-03	--	--	--	--	28	4.77	4.01	2.12	11.8	.06
Pi31-05	12-04-03	--	5.4	107	14.3	--	--	--	--	--	--
	12-04-03	--	--	--	--	17	2.37	2.61	2.11	10.9	.05
Pi31-11	12-11-03	--	5.6	93	14.0	--	--	--	--	--	--
	12-11-03	--	--	--	--	12	3.11	1.10	1.46	11.1	.05
Pi31-12	12-17-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	--	--	--	--	--	.02	<.008	<.16	E.06n	E.01n
	12-17-03	--	5.5	107	14.4	--	--	--	--	--	--
	12-17-03	--	--	--	--	20	4.97	1.73	1.76	9.83	.05
Pi31-13	02-12-04	--	--	--	--	--	.02	<.008	<.16	.14	<.02
	02-12-04	--	5.4	186	13.3	35	6.53	4.48	2.81	23.1	.91d
	02-12-04	--	5.4	188	13.1	34	6.29	4.35	2.73	22.8	.96d
	02-12-04	--	5.4	188	13.2	34	6.34	4.39	2.72	23.2	.86d
Pi31-16	09-14-04	17	5.3	161	17.4	28	5.35	3.56	2.07	16.2	.31d
Pi31-17	09-14-04	15	5.3	148	15.7	19	3.31	2.57	2.19	19.2	.51d
Pi31-18	09-14-04	E31	5.2	163	16.0	22	3.86	3.01	2.48	21.2	.66d
Pi31-19	09-14-04	49	5.2	132	15.3	16	1.87	2.66	1.95	15.8	.11
Pi31-20	09-13-04	E50	5.0	146	15.1	28	3.12c	4.94c	2.38c	13.4c	.06
Pi31-21	09-13-04	51	5.0	156	14.5	29	3.49	4.85	1.61	14.2	.06
Pi32-14	12-08-03	--	5.6	255	15.4	--	--	--	--	--	--
	12-08-03	--	--	--	--	61	10.7	8.31	2.55	23.1	.10
Pi32-15	11-26-03	--	5.6	123	14.6	--	--	--	--	--	--
	11-26-03	--	--	--	--	25	4.87	3.19	1.93	10.6	.05
Pi34-09	12-03-03	--	5.2	111	14.0	--	--	--	--	--	--
	12-03-03	--	--	--	--	15	2.36	2.16	4.01	10.8	.07
Pi41-02	12-15-03	--	5.8	75	13.9	--	--	--	--	--	--
	12-15-03	--	--	--	--	7	1.68	.696	1.24	10.4	.05
Pi41-03	11-26-03	--	5.7	70	14.1	--	--	--	--	--	--
	11-26-03	--	--	--	--	8	2.18	.623	1.35	9.52	.04
Pi43-03	12-03-03	--	5.7	281	13.8	--	--	--	--	--	--
	12-03-03	--	--	--	--	50	13.4	3.91	16.3	19.5	.16

QUALITY OF GROUND WATER DATA
 SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	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 water, sum of constituents, mg/L (70301)	Residue on evap. at 180degC, wat flt mg/L (70300)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic carbon, water, fltrd, mg/L (00681)
Pi31-02	12-09-03	--	--	--	--	--	--	--	6.55d	<.008	.4
	12-09-03	16.5	<.2	17.5	3.2	--	96	--	--	--	--
Pi31-05	12-04-03	--	--	--	--	--	--	--	2.58	<.008	.4
	12-04-03	15.3	<.2	17.0	4.8	--	66	--	--	--	--
Pi31-11	12-11-03	--	--	--	--	--	--	--	2.14	<.008	E.3n
	12-11-03	12.7	<.2	19.9	2.4	--	77	--	--	--	--
Pi31-12	12-17-03	--	--	--	--	--	--	--	<.06	<.008	E.2n
	12-17-03	<.20	<.2	E.03n	<.2	--	<10	--	--	--	--
	12-17-03	--	--	--	--	--	--	--	3.07	<.008	E.3n
	12-17-03	14.1	<.2	19.8	4.0	--	76	--	--	--	--
Pi31-13	02-12-04	<.20	<.2	.10	<.2	--	<10	--	<.06	<.008	<.3
	02-12-04	25.2	<.2	18.7	3.0	105	132	--	2.12	<.008	5.6
	02-12-04	25.7	<.2	18.5	3.0	105	126	--	2.05	<.008	5.8
	02-12-04	26.0	<.2	18.5	3.1	105	132	--	1.90	<.008	5.9
Pi31-16	09-14-04	15.1	<.2	18.2	2.5	104	99	--	6.93d	<.008	1.3
Pi31-17	09-14-04	20.0	<.2	16.7	4.0	87	88	--	1.24	<.008	2.5
Pi31-18	09-14-04	23.1	<.2	17.4	4.2	96	100	.95	.96	.013	3.1
Pi31-19	09-14-04	20.4	<.2	15.5	6.9	78	82	--	2.03	<.008	.5
Pi31-20	09-13-04	18.2	<.2	15.5c	14.4	85	88	--	2.13	<.008	.7
Pi31-21	09-13-04	30.5	<.2	15.5	7.2	86	87	--	1.42	<.008	.6
Pi32-14	12-08-03	--	--	--	--	--	--	--	7.45d	<.008	.4
	12-08-03	36.5	<.2	21.2	18.6	--	169	--	--	--	--
Pi32-15	11-26-03	--	--	--	--	--	--	--	4.75	<.008	E.3n
	11-26-03	13.0	<.2	18.6	5.7	--	80	--	--	--	--
Pi34-09	12-03-03	--	--	--	--	--	--	--	2.52	<.008	.3
	12-03-03	14.9	<.2	8.50	10.6	--	70	--	--	--	--
Pi41-02	12-15-03	--	--	--	--	--	--	--	1.90	<.008	<.3
	12-15-03	10.1	<.2	20.3	1.7	--	62	--	--	--	--
Pi41-03	11-26-03	--	--	--	--	--	--	--	.91	<.008	<.3
	11-26-03	9.77	<.2	23.1	3.0	--	56	--	--	--	--
Pi43-03	12-03-03	--	--	--	--	--	--	--	3.68	E.005n	.4
	12-03-03	49.1	<.2	14.2	15.7	--	159	--	--	--	--

QUALITY OF GROUND WATER DATA
SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)
Pi31-02	12-09-03	--	--	--	--	--	--	--	--	--	--
	12-09-03	<2	75	11	.08	.8	1.8	E5n	--	4.77	6.1
Pi31-05	12-04-03	--	--	--	--	--	--	--	--	--	--
	12-04-03	<2	71	13	.05	E.7n	7.4	60	--	4.92	5.9
Pi31-11	12-11-03	--	--	--	--	--	--	--	--	--	--
	12-11-03	<2	31	9	E.03n	E.6n	1.7	<6	--	.45	E.7n
Pi31-12	12-17-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	<2	<.2	<8	<.04	<.8	<.4	<6	--	<.08	<.8
	12-17-03	--	--	--	--	--	--	--	--	--	--
	12-17-03	<2	40	10	.04	<.8	2.9	E5n	--	.96	1.9
Pi31-13	02-12-04	--	<.2	--	--	--	--	<6	<9.0	<.08	<.8
	02-12-04	--	120	--	--	--	--	13	10	.84	174
	02-12-04	--	122	--	--	--	--	7	Mn	.14	183
	02-12-04	--	122	--	--	--	--	E6n	Mn	.35	187
Pi31-16	09-14-04	--	--	--	--	--	--	10	--	--	18.8
Pi31-17	09-14-04	--	--	--	--	--	--	24	--	--	97.0
Pi31-18	09-14-04	--	--	--	--	--	--	50	--	--	252
Pi31-19	09-14-04	--	--	--	--	--	--	<6	--	--	9.9
Pi31-20	09-13-04	--	--	--	--	--	--	9	--	--	39.7c
Pi31-21	09-13-04	--	--	--	--	--	--	13	--	--	35.7
Pi32-14	12-08-03	--	--	--	--	--	--	--	--	--	--
	12-08-03	<2	131	16	.16	3.9	2.2	<6	--	1.27	22.3
Pi32-15	11-26-03	--	--	--	--	--	--	--	--	--	--
	11-26-03	<2	54	13	.05	1.5	3.1	14	--	.26	3.9
Pi34-09	12-03-03	--	--	--	--	--	--	--	--	--	--
	12-03-03	<2	120	19	E.03n	<.8	1.3	<6	--	.51	9.0
Pi41-02	12-15-03	--	--	--	--	--	--	--	--	--	--
	12-15-03	<2	31	9	E.02n	E.7n	201	34	--	.64	1.2
Pi41-03	11-26-03	--	--	--	--	--	--	--	--	--	--
	11-26-03	<2	24	12	<.04	E.8n	2.1	44	--	1.36	1.4
Pi43-03	12-03-03	--	--	--	--	--	--	--	--	--	--
	12-03-03	<2	190	30	.12	<.8	47.9	197	--	.50	7.1

QUALITY OF GROUND WATER DATA
 SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Manganese, water, unfltrd recover-able, ug/L (01055)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Zinc, water, fltrd, ug/L (01090)	1,1,1,2-Tetrachloroethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)
Pi31-02	12-09-03	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
	12-09-03	--	<.4	.88	.5	35.9	--	--	--	--	--
Pi31-05	12-04-03	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
	12-04-03	--	<.4	1.30	.7	313	--	--	--	--	--
Pi31-11	12-11-03	--	--	--	--	--	<.03b	E.02n	<.16	<.04b	<.06b
	12-11-03	--	<.4	.68	<.4	3.8	--	--	--	--	--
Pi31-12	12-17-03	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
	12-17-03	--	<.4	<.06	<.4	E.3n	--	--	--	--	--
	12-17-03	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
	12-17-03	--	<.4	1.20	.5	5.4	--	--	--	--	--
Pi31-13	02-12-04	<1.2	--	--	--	--	--	--	--	--	--
	02-12-04	176	--	--	--	--	--	--	--	--	--
	02-12-04	186	--	--	--	--	--	--	--	--	--
	02-12-04	184	--	--	--	--	--	--	--	--	--
Pi31-16	09-14-04	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
Pi31-17	09-14-04	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
Pi31-18	09-14-04	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
Pi31-19	09-14-04	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
Pi31-20	09-13-04	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
Pi31-21	09-13-04	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
Pi32-14	12-08-03	--	--	--	--	--	<.03b	E.01t	<.16	<.04b	<.06b
	12-08-03	--	<.4	1.34	.7	9.3	--	--	--	--	--
Pi32-15	11-26-03	--	--	--	--	--	<.03b	E.05b	<.16	<.04b	<.06b
	11-26-03	--	<.4	.75	1.0	18.9	--	--	--	--	--
Pi34-09	12-03-03	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
	12-03-03	--	<.4	.32	E.2n	4.9	--	--	--	--	--
Pi41-02	12-15-03	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
	12-15-03	--	<.4	.45	<.4	16.8	--	--	--	--	--
Pi41-03	11-26-03	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
	11-26-03	--	<.4	.50	E.3n	3.8	--	--	--	--	--
Pi43-03	12-03-03	--	--	--	--	--	<.03b	<.03b	<.16	<.04b	<.06b
	12-03-03	--	<.4	1.21	1.1	120	--	--	--	--	--

QUALITY OF GROUND WATER DATA
SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)
Pi31-02	12-09-03	<.16	.82	<.1b
	12-09-03	--	--	--
Pi31-05	12-04-03	<.16	3.17	<.1b
	12-04-03	--	--	--
Pi31-11	12-11-03	<.16	1.52	<.1b
	12-11-03	--	--	--
Pi31-12	12-17-03	<.16	<.02b	<.1b
	12-17-03	--	--	--
	12-17-03	<.16	.98	<.1b
	12-17-03	--	--	--
Pi31-13	02-12-04	--	--	--
	02-12-04	--	--	--
	02-12-04	--	--	--
	02-12-04	--	--	--
Pi31-16	09-14-04	<.16	.44	<.1b
Pi31-17	09-14-04	<.16	.37	<.1b
Pi31-18	09-14-04	<.16	.35	<.1b
Pi31-19	09-14-04	<.16	.51	<.1b
Pi31-20	09-13-04	<.16	2.18	<.1b
Pi31-21	09-13-04	<.16	3.53	<.1b
Pi32-14	12-08-03	<.16	E.02n	<.1b
	12-08-03	--	--	--
Pi32-15	11-26-03	<.16	1.16	<.1b
	11-26-03	--	--	--
Pi34-09	12-03-03	<.16	<.02b	<.1b
	12-03-03	--	--	--
Pi41-02	12-15-03	<.16	1.10	<.1b
	12-15-03	--	--	--
Pi41-03	11-26-03	<.16	.81	<.1b
	11-26-03	--	--	--
Pi43-03	12-03-03	<.16	.64	<.1b
	12-03-03	--	--	--

Remark codes used in this table:

< -- Less than
E -- Estimated value
M-- Presence verified, not quantified

Value qualifier codes used in this table:

b -- Value extrapolated at low end
d -- Diluted sample: method hi range exceeded
m-- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
t -- Below the long-term MDL

QUALITY OF GROUND WATER DATA
ANNE ARUNDEL COUNTY, MARYLAND

Well Number	Date	Time	Station number	Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
AA Ad 102	12-29-03	1515	391032076385904	Environmental	217PPSCL	GW	95	95	85
	12-29-03	1516		Replicate	217PPSCL	GW	95	95	85
AA Bc 252	10-09-03	1040	390844076430701	Environmental	217PPSC	GW	55	55	48
	10-09-03	1041		Replicate	217PPSC	GW	55	55	48
AA Bd 126	10-08-03	1240	390915076381401	Environmental	217PPSC	GW	80	80	70
	10-08-03	1241		Replicate	217PPSC	GW	80	80	70

Date	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 25 degC (00095)	
AA Ad 102	12-29-03	5.88	76.72	<1.0	120	4080	763	2.6	25	5.8	179
	12-29-03	--	76.7	--	--	4080	--	--	--	--	--
AA Bc 252	10-09-03	24.04	198	.21	159	4040	764	11.4	114	6.0	512
	10-09-03	--	198	--	--	4040	--	--	--	--	--
AA Bd 126	10-08-03	26.20	70	.15	200	4040	766	6.2	63	4.7	233
	10-08-03	--	70	--	--	4040	--	--	--	--	--

Date	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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, wat fltr inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat fltr incrm. titr., mg/L (00453)	Bromide water, fltrd, mg/L (71870)	
AA Ad 102	12-29-03	15.0	13.7	23	5.05	2.58	1.89	9.75	54	66	.37d
	12-29-03	--	--	--	--	--	--	--	--	--	--
AA Bc 252	10-09-03	25.0	15.3	55	16.0	3.59	4.69	73.9	42	52	.06
	10-09-03	--	--	--	--	--	--	--	--	--	--
AA Bd 126	10-08-03	19.0	16.1	49	10.9	5.27	3.16	16.5	1	2	.04
	10-08-03	--	--	--	--	--	--	--	--	--	--

Date	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 water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat fltr mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	
AA Ad 102	12-29-03	18.9	<.2	5.91	1.4	88	69	--	.13	.37	.41
	12-29-03	--	--	--	--	--	--	--	--	--	--
AA Bc 252	10-09-03	96.6	<.2	5.77	21.4	275	270	.14	<.04	--	6.18d
	10-09-03	--	--	--	--	--	--	--	--	--	--
AA Bd 126	10-08-03	32.0	<.2	6.98	24.5	127	122	.12	<.04	--	5.74d
	10-08-03	--	--	--	--	--	--	--	--	--	--

Geologic Unit (aquifer): 217PPSCL - Patapsco Aquifer In The Patapsco Formation
217PPSC - Lower Patapsco Formation

Station Type: GW - Ground Water

Sampling Method: 4080 - Peristaltic pump
4040 - Submersible pump

QUALITY OF GROUND WATER DATA
ANNE ARUNDEL COUNTY, MARYLAND—Continued

Well Number	Date	trans-1,4-Di-chloro-2-butene, wat unfltrd ug/L (73547)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Ra-228, water, fltrd, pCi/L (81366)	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)	Uranium natural water, fltrd, ug/L (22703)
AA Ad 102	12-29-03	<.7b	<.10	E.09b	<.16	<.02b	<.1b	5	16	M	<.04
	12-29-03	--	--	--	--	--	--	--	--	--	--
AA Bc 252	10-09-03	<.7b	<.10	<.04b	<.16	.51	<.1n	7	18	140	.04
	10-09-03	--	--	--	--	--	--	--	--	--	--
AA Bd 126	10-08-03	<.7b	<.10	<.04b	<.16	.37	<.1n	12	19	190	.13
	10-08-03	--	--	--	--	--	--	--	--	--	--

Remark codes used in this table:

< -- Less than
E -- Estimated value
M-- Presence verified, not quantified

Value qualifier codes used in this table:

b -- Value extrapolated at low ed-- Diluted sample:
method hi range exceeded
k -- Counts outside acceptable range
m-- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
t -- Below the long-term MDL

QUALITY OF GROUND WATER DATA

BALTIMORE CITY, MARYLAND

Well Number	Date	Time	Station number		Sample type		Geologic unit	Station type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
3S2E- 5	12-27-03	1315	391600076353301		Environmental		217PTXN	GW	136	136	126
	12-27-03	1316			Replicate		217PTXN	GW	136	136	126
	Date	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)
	12-27-03	4.86	15	.37	250	4040	768	13.8	134	5.6	857
12-27-03	--	--	--	--	4040	--	--	--	--	--	
Date	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	
12-27-03	12.0	14.6	400	134	16.3	5.18	23.5	339	413	.19	
12-27-03	--	--	--	--	--	--	--	--	--	--	
Date	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 water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	
12-27-03	17.6	.7	26.7	84.7	531	533	.63	1.87	2.18	.310	
12-27-03	--	--	--	--	--	--	--	--	--	--	
Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Organic carbon, water, fltrd, mg/L (00681)	E coli, MI MF, water, col/ 100 mL (90901)	Total coliform, MI MF, water, col/ 100 mL (90900)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	
12-27-03	<.006	4.9	E5k	E5k	<2	1.27	.7	58	<.06	122	
12-27-03	--	--	E1k	E1k	--	--	--	--	--	--	

Geologic Unit (aquifer): 217 PTXN - Patuxent Formation

Station Type: GW - Ground Water

Sampling Method: 4040 - Submersible pump

QUALITY OF GROUND WATER DATA

BALTIMORE CITY, MARYLAND—Continued

Well Number	Date	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)
3S2E- 5	12-27-03 12-27-03	<.004 --	<.022 --	<.011 --	<.01 --	<.004 --	<.025 --	<.011 --	<.02 --	<.005 --	E.02 --
		Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2- Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2- Tetra- chloro- ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)
	12-27-03 12-27-03	<.034 --	<.02 --	<.010 --	<.002 --	<.009 --	<.03b --	<.03b --	<.16 --	<.04b --	<.06b --
		1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethane, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3,4 Tetra- methyl- benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra- methyl- benzene water unfltrd ug/L (50000)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,3- Tri- methyl- benzene water unfltrd ug/L (77221)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)
	12-27-03 12-27-03	<.04b --	<.02b --	<.03b --	<.1 --	<.1 --	<.3 --	<.18 --	<.1b --	<.1 --	E.03n --
		Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)
	12-27-03 12-27-03	<.5 --	<.04b --	<.05b --	<.1 --	107 --	<.03b --	<.04b --	<.03b --	<.1b --	.12 --
		14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	2- Ethyl- toluene water unfltrd ug/L (77220)	3- Chloro- propene water unfltrd ug/L (78109)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylo- nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)
	12-27-03 12-27-03	78.1 --	<.05b --	<.04b --	<.06b --	<.50m --	<.05b --	<.08b --	<.6 --	<.1 --	E.04b --

QUALITY OF GROUND WATER DATA
BALTIMORE CITY, MARYLAND—Continued

Well Number	Date	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)	Ra-228, water, fltrd, pCi/L (81366)	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)	Uranium natural water, fltrd, ug/L (22703)
3S2E- 5	12-27-03 12-27-03	<.16 --	<.02b --	<.1b --	M --	22 --	170 --	4.14 --

Remark codes used in this table:
 < -- Less than
 E -- Estimated value
 M-- Presence verified, not quantified

Value qualifier codes used in this table:
 b -- Value extrapolated at low end
 k -- Counts outside acceptable range
 m-- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

QUALITY OF GROUND WATER , MARYLAND

BALTIMORE COUNTY, MARYLAND

Well Number	Date	Time	Station number		Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	
BA Ff 92	10-22-03	1035	391904076294701		Environmental	217PPSC	GW	70	70	60	
	10-22-03	1036			Replicate	217PPSC	GW	70	70	60	
	Date	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	
	10-22-03	23.60	38	.73	156	4040	750	9.6	95	4.4	376
	10-22-03	--	38	--	--	4040	--	--	--	--	--
	Date	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
	10-22-03	16.0	14.2	120	38.4	6.77	7.49	5.30	.04	16.2	<.2
	10-22-03	--	--	--	--	--	--	--	--	--	--
	Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Total nitrogen, water, fltrd, mg/L (00602)	Organic carbon, water, fltrd, mg/L (00681)
	10-22-03	4.61	68.0	221	.23	<.04	18.5d	<.008	<.02	19	1.2
	10-22-03	--	--	--	--	--	--	--	--	--	--
	Date	E coli, MI MF, water, col/100 mL (90901)	Total coliform, MI MF, water, col/100 mL (90900)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic, water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)
	10-22-03	<1	<1	721	<.20	.3	39	.51	33	.17	<.8
	10-22-03	<1	<1	--	--	--	--	--	--	--	--

Geologic Unit (aquifer): 217PPSC - Patapsco Formation

Station Type: GW - Ground Water

Sampling Method: 4040 - Submersible pump

QUALITY OF GROUND WATER DATA
BALTIMORE COUNTY, MARYLAND—Continued

Well Number	Date	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)
BA Ff 92	10-22-03 10-22-03	<.011 --	<.01 --	<.004 --	<.010 --	<.011 --	<.02 --	<.007 --	<.02 --	<.034 --	<.02 --
	Date	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-fluralin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2-Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)
	10-22-03 10-22-03	<.005 --	<.002 --	<.009 --	<.03b --	<.03b --	<.16 --	<.04n --	<.06b --	<.04b --	<.02n --
	Date	1,1-Di-chloro-propene water unfltrd ug/L (77168)	1,2,3,4 Tetra-methyl-benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000)	1,2,3-Tri-chloro-benzene water unfltrd ug/L (77613)	1,2,3-Tri-chloro-propane water unfltrd ug/L (77443)	1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)	1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)	1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)	Dibromo-chloro-propane water unfltrd ug/L (82625)	1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)
	10-22-03 10-22-03	<.03t --	<.1n --	<.1n --	<.3 --	<.18 --	<.1n --	<.1 --	<.06b --	<.5 --	<.04b --
	Date	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-ethane-d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3,5-Tri-methyl-benzene water unfltrd ug/L (77226)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,3-Di-chloro-propane water unfltrd ug/L (77173)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	14Bromo fluoro-benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di-chloro-propane water unfltrd ug/L (77170)
	10-22-03 10-22-03	<.05b --	<.1 --	.118 --	<.03b --	<.04b --	<.03b --	<.1n --	.18 --	87.4 --	<.05b --
	Date	2-Chloro-toluene water unfltrd ug/L (77275)	2-Ethyl-toluene water unfltrd ug/L (77220)	3-Chloro-propene water unfltrd ug/L (78109)	4-Chloro-toluene water unfltrd ug/L (77277)	4-Iso-propyl-toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylo-nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo-benzene water unfltrd ug/L (81555)	Bromo-chloro-methane water unfltrd ug/L (77297)
	10-22-03 10-22-03	<.04b --	<.06b --	<.50m --	<.05b --	<.08n --	<.6n --	<.1 --	<.02b --	<.03n --	<.12 --

QUALITY OF GROUND WATER DATA
BALTIMORE COUNTY, MARYLAND—Continued

Well Number	Date	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Ra-228, water, fltrd, pCi/L (81366)	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)	Uranium natural water, fltrd, ug/L (22703)
BA Ff 92	10-22-03	<.1n	19	18	110	.16
	10-22-03	--	--	--	--	--

Remark codes used in this table:

< -- Less than
E -- Estimated value

Value qualifier codes used in this table:

b -- Value extrapolated at low end
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
t -- Below the long-term MDL

CARROLL COUNTY, MARYLAND

Well Number	Date	Time	Station number	Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Sampling method, code (82398)
CL Bd 179	08-31-04	0915	393338076593501	Environmental	300SMCK	GW	623.00	--	4040
CL Bd 179 - finished water	08-31-04	0946	393338076593502	Finished water	--	SS	--	--	8030
CL Bd 180	08-31-04	1042	393641077002801	Environmental	300WSCK	GW	300	770	4040
CL Bd 180 - finished water	08-31-04	1125	393641077002802	Finished water	--	SS	--	770	8030
	08-31-04	1145		Blank	--	SS	--	770	4040

Date	Barometric pressure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	1,1,1,2-Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	
CL Bd 179	08-31-04	747	5.5	54	6.5	700	20.0	13.8	<.03b	.10	<.16
CL Bd 179 - finish	08-31-04	747	4.2	42	6.5	703	20.0	14.5	<.03b	.11	<.16
CL Bd 180	08-31-04	747	5.4	52	6.3	489	19.5	12.9	<.03b	<.03b	<.16
CL Bd 180 - finish	08-31-04	747	5.6	54	7.0	522	20.0	13.0	<.03b	<.03b	<.16
	08-31-04	--	--	--	--	--	--	--	<.03b	<.03b	<.16

Date	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water, unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,1-Di-chloro-propene water unfltrd ug/L (77168)	1,2,3,4 Tetra-methyl-benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000)	1,2,3-Tri-chloro-benzene water unfltrd ug/L (77613)	1,2,3-Tri-chloro-propane water unfltrd ug/L (77443)	1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)	
CL Bd 179	08-31-04	<.04b	<.06b	<.04b	E.04b	<.03b	<.1	<.1	<.3	<.18	<.1b
CL Bd 179 - finish	08-31-04	<.04b	<.06b	<.04b	E.04b	<.03b	<.1	<.1	<.3	<.18	<.1b
CL Bd 180	08-31-04	<.04b	<.06b	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b
CL Bd 180 - finish	08-31-04	<.04b	<.06b	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b
	08-31-04	<.04b	<.06b	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b

Date	1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)	1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)	Dibromo-chloro-propane water unfltrd ug/L (82625)	1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-ethane-d4, sur Sch2090 wat unfltrd ug/L (99832)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3,5-Tri-methyl-benzene water unfltrd ug/L (77226)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	
CL Bd 179	08-31-04	<.1	<.06b	<.5	<.04b	<.05b	<.1	109	<.03b	<.04b	<.03b
CL Bd 179 - finish	08-31-04	<.1	<.06b	<.5	<.04b	<.05b	<.1	106	<.03b	<.04b	<.03b
CL Bd 180	08-31-04	<.1	<.06b	<.5	<.04b	<.05b	<.1	105	<.03b	<.04b	<.03b
CL Bd 180 - finish	08-31-04	<.1	<.06b	<.5	<.04b	<.05b	<.1	111	<.03b	<.04b	<.03b
	08-31-04	<.1	<.06b	<.5	<.04b	<.05b	<.1	119	<.03b	<.04b	<.03b

Geologic Unit (aquifer): 300SMCK - Sams Creek Metabasalt

Station Type: GW - Ground Water
SS - Specific source

Sampling Method: 4040 - Submersible pump
8030 - Grab sample at water-supply tap

QUALITY OF GROUND WATER DATA
CARROLL COUNTY, MARYLAND—Continued

Well Number	Date	1,3-Di-chloro-propane water unfltrd ug/L (77173)	1,4-Di-chloro-benzene unfltrd ug/L (34571)	14Bromo fluoro-benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di-chloro-propane water unfltrd ug/L (77170)	2-Chloro-toluene water unfltrd ug/L (77275)	2-Ethyl-toluene water unfltrd ug/L (77220)	3-Chloro-propene water unfltrd ug/L (78109)	4-Chloro-toluene water unfltrd ug/L (77277)	4-Iso-propyl-toluene unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)
CL Bd 179	08-31-04	<.1b	E.02n	87.7	<.05b	<.04b	<.06b	<.50m	<.05b	<.08b	<.6
CL Bd 179 - finish	08-31-04	<.1b	E.05b	81.1	<.05b	<.04b	<.06b	<.50m	<.05b	<.08b	<.6
CL Bd 180	08-31-04	<.1b	E.04b	87.9	<.05b	<.04b	<.06b	<.50m	<.05b	<.08b	<.6
CL Bd 180 - finish	08-31-04	<.1b	E.02n	81.6	<.05b	<.04b	<.06b	<.50m	<.05b	<.08b	<.6
	08-31-04	<.1b	<.03b	98.8	<.05b	<.04b	<.06b	<.50m	<.05b	<.08b	E3t
	Date	Acrylo-nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo-benzene water unfltrd ug/L (81555)	Bromo-chloro-methane water unfltrd ug/L (77297)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Bromo-ethene, water, unfltrd ug/L (50002)	Bromo-methane water unfltrd ug/L (34413)	Carbon di-sulfide water unfltrd ug/L (77041)	Chloro-benzene water unfltrd ug/L (34301)	Chloro-ethane, water, unfltrd ug/L (34311)
CL Bd 179	08-31-04	<.1	<.02b	<.03b	<.12	.11	<.1	<.3m	<.04b	<.03b	<.1
CL Bd 179 - finish	08-31-04	<.1	<.02b	<.03b	<.12	.17	<.1	<.3m	<.04b	<.03b	<.1
CL Bd 180	08-31-04	<.1	<.02b	<.03b	<.12	<.03b	<.1	<.3m	<.04b	<.03b	<.1
CL Bd 180 - finish	08-31-04	<.1	<.02b	<.03b	<.12	<.03b	<.1	<.3m	<.04b	<.03b	<.1
	08-31-04	<.1	<.02b	<.03b	<.12	<.03b	<.1	<.3m	<.04b	<.03b	<.1
	Date	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-bromo-methane water unfltrd ug/L (30217)	Di-chloro-di-fluoro-methane wat unf ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl methac-rylate, water, unfltrd ug/L (73570)
CL Bd 179	08-31-04	<.2m	<.02b	<.05b	<.1	<.05b	<.18m	<.1b	<.1b	<.10	<.2
CL Bd 179 - finish	08-31-04	<.2m	<.02b	<.05b	.2	<.05b	<.18m	Mt	<.1b	<.10	<.2
CL Bd 180	08-31-04	<.2m	<.02b	<.05b	<.1	<.05b	<.18m	<.1b	<.1b	E.04t	<.2
CL Bd 180 - finish	08-31-04	<.2m	<.02b	<.05b	<.1	<.05b	<.18m	<.1b	<.1b	E.05n	<.2
	08-31-04	<.2m	<.02b	<.05b	<.1	<.05b	<.18m	<.1b	<.1b	<.10	<.2
	Date	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethyl-benzene water unfltrd ug/L (34371)	Hexa-chloro-buta-diene, water, unfltrd ug/L (39702)	Hexa-chloro-ethane, water, unfltrd ug/L (34396)	Iodo-methane water unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)
CL Bd 179	08-31-04	<.4.0	<.03b	<.1	<.1	<.35m	<.4b	<.04b	<.8	<.2.0	<.3
CL Bd 179 - finish	08-31-04	<.4.0	<.03b	<.1	<.1	<.35m	<.4b	<.04b	<.8	<.2.0	<.3
CL Bd 180	08-31-04	<.4.0	<.03b	<.1	<.1	<.35m	<.4b	<.04b	<.8	<.2.0	<.3
CL Bd 180 - finish	08-31-04	<.4.0	<.03b	<.1	<.1	<.35m	<.4b	<.04b	<.8	<.2.0	<.3
	08-31-04	<.4.0	<.03b	<.1	<.1	<.35m	<.4b	<.04b	<.8	<.2.0	<.3

QUALITY OF GROUND WATER DATA

CARROLL COUNTY, MARYLAND—Continued

Well Number	Date	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propylbenzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butylbenzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ether, water, unfltrd ug/L (50004)
CL Bd 179	08-31-04	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b	<.06b	<.04b	<.05b
CL Bd 179 - finish	08-31-04	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b	<.06b	<.04b	<.05b
CL Bd 180	08-31-04	.23	<.06b	<.5	<.7b	<.1	<.04b	<.04b	<.06b	<.04b	<.05b
CL Bd 180 - finish	08-31-04	.21	<.06b	<.5	<.7b	<.1	<.04b	<.04b	<.06b	<.04b	<.05b
	08-31-04	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b	<.06b	<.04b	<.05b

	Date	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butylbenzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetrahydrofuran, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unfltrd percent recovery (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unfltrd ug/L (73547)
CL Bd 179	08-31-04	.3	<.06b	E.01t	<.06b	<2	<.05b	101	<.03b	<.09b	<.7b
CL Bd 179 - finish	08-31-04	.3	<.06b	E.01t	<.06b	<2	<.05b	101	<.03b	<.09b	<.7b
CL Bd 180	08-31-04	2.7	<.06b	<.06b	<.06b	<2	<.05b	98.1	<.03b	<.09b	<.7b
CL Bd 180 - finish	08-31-04	2.6	<.06b	<.06b	<.06b	<2	<.05b	99.5	<.03b	<.09b	<.7b
	08-31-04	<.2	<.06b	<.06b	<.06b	<2	<.05b	100	<.03b	<.09b	<.7b

	Date	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
CL Bd 179	08-31-04	<.10	<.04b	<.16	1.57	<.1b
CL Bd 179 - finish	08-31-04	<.10	<.04b	<.16	1.57	<.1b
CL Bd 180	08-31-04	<.10	<.04b	<.16	E.09b	<.1b
CL Bd 180 - finish	08-31-04	<.10	<.04b	<.16	.11	<.1b
	08-31-04	<.10b	<.04b	<.16	<.02b	<.1b

Remark codes used in this table:

- < -- Less than
- E -- Estimated value
- M-- Presence verified, not quantified

Value qualifier codes used in this table:

- b -- Value extrapolated at low end
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

QUALITY OF GROUND WATER DATA

CECIL COUNTY, MARYLAND

Well Number	Date	Time	Station number	Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
CE Cd 89	10-01-03	1050	393240075572301	Environmental	211MGTY	GW	135	135	130
	10-01-03	1051		Replicate	211MGTY	GW	135	135	130
CE Dd 102	11-04-03	1300	392544075574803	Environmental	211MGTY	GW	112	112	107
	11-04-03	1305		Replicate	217PTMC	GW	112	112	107

	Date	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Color, water, fltrd, Pt-Co units (00080)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 25 degC (00095)
CE Cd 89	10-01-03	82.33	67.8	.88	--	4040	764	8.5	85	4.5	18
	10-01-03	--	67.8	--	--	4040	--	--	--	--	--
CE Dd 102	11-04-03	--	65	E50	5	8030	--	--	--	5.2	52
	11-04-03	--	65	50.0	10	8030	--	--	--	--	--

	Date	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)
CE Cd 89	10-01-03	16.0	15.4	2	.43	.239	.33	1.52	<1	<1	.02
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	14.9	8	1.46	1.08	1.32	4.41	4	5	--
	11-04-03	--	--	8	1.45	1.07	1.31	4.28	--	--	--

	Date	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 water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
CE Cd 89	10-01-03	2.41	<.2	7.07	.7	--	21	<.10	<.04	.21	<.008
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	5.91	<.2	12.6	5.7	39	37	--	<.04	.71	<.008
	11-04-03	5.78	<.2	12.7	5.7	38	47	--	<.04	.74	<.008

Geologic Unit (aquifer): 211MGTY - Magothy Formation
217PTMC - Potomac Group

Station Type: GW - Ground Water

Sampling Method: 4040 - Submersible pump

8030 - Grab sample at water-supply tap

QUALITY OF GROUND WATER DATA

CECIL COUNTY, MARYLAND—Continued

Well Number	Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd, mg/L (00680)	E coli, MI MF, water, col/100 mL (90901)	Total coliform, MI MF, water, col/100 mL (90900)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic, water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)
		CE Cd 89	10-01-03	<.02	--	E.2n	--	<1	<1	14	<.20	<.2	5
	10-01-03	--	--	--	--	<1	<1	--	--	--	--
CE Dd 102	11-04-03	<.02	<.04	--	<.4	--	--	--	--	<.2	--
	11-04-03	<.02	<.04	--	<.4	--	--	--	--	<.2	--
Well Number	Date	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Iron, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)
		CE Cd 89	10-01-03	.29	<.04	3.4	6.16	47.7	<.8	--	1.67	2.7
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	<.06	--	--	--	--	--	1,030	1,040	E.06n	--
	11-04-03	<.06	--	--	--	--	--	1,020	1,070	E.05n	--
Well Number	Date	Manganese, water, unfltrd recover-able, ug/L (01056)	Manganese, water, fltrd recover-able, ug/L (01055)	Mercury, water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Thallium, water, fltrd, ug/L (01057)	Vanadium, water, fltrd, ug/L (01085)
		CE Cd 89	10-01-03	22.4	--	<.4	8.01	<.4	<.2	2.44	<.04	.3
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	34.6	29.3	<.02	--	--	--	--	--	<.04	--
	11-04-03	34.4	30.2	<.02	--	--	--	--	--	<.04	--
Well Number	Date	Zinc, water, fltrd, ug/L (01090)	2,6-Diethyl-aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6 surrog, Sch1379 wat flt percent recovery (90505)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovery (91065)	Ametryn water, fltrd, ug/L (38401)
		CE Cd 89	10-01-03	17.4	<.006	<.006	--	<.006	<.004	<.005	--	90.8	--
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	--	<.05	<.05	<.05	<.05	--	63.7	--	<.05
	11-04-03	--	--	E.01	<.05	<.05	<.05	--	65.8	--	<.05
Well Number	Date	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF (82686)	Ben-flur-alin, water, fltrd 0.7u GF (82673)	Broma-cil, water, fltrd, ug/L (04029)	Buta-chlor, water, fltrd, ug/L (04026)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF (82680)	Carbo-furan, water, fltrd 0.7u GF (82674)	Car-boxin, water, fltrd, ug/L (04027)	Chlor-pyrifos water, fltrd, ug/L (38933)
		CE Cd 89	10-01-03	<.007	<.050	<.010	--	--	<.002	<.041	<.020	--	<.005
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	<.05	--	--	<1.00	<.05	<.05	--	--	<.05	--
	11-04-03	<.05	--	--	<1.00	<.05	<.05	--	--	<.05	--

QUALITY OF GROUND WATER DATA
 CECIL COUNTY, MARYLAND—Continued

Well Number	Date	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 sur Sch 1379, wat flt pct rcv (90670)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovery (91063)	Dieldrin, water, fltrd, ug/L (39381)	Diphenamid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)
CE Cd 89	10-01-03	<.006	<.018	--	<.003	<.005	--	92.7	<.005	--	<.02
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	<.02	<.05	--	--	79.1	--	--	<.05	--
	11-04-03	--	<.02	<.05	--	--	81.4	--	--	<.05	--
		EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)
CE Cd 89	10-01-03	<.002	<.009	<.005	<.003	--	<.004	<.035	<.027	<.006	<.013
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	--	--	--	<.05	--	--	--	--	<.05
	11-04-03	--	--	--	--	<.05	--	--	--	--	<.05
		Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)
CE Cd 89	10-01-03	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	--
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	<.05	--	--	--	--	--	--	--	<.05	<.05
	11-04-03	<.05	--	--	--	--	--	--	--	<.05	<.05
		Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propanchlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propazine, water, fltrd, ug/L (38535)	Simazine, water, fltrd, ug/L (04035)	Simetryn, water, fltrd, ug/L (04030)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)
CE Cd 89	10-01-03	<.004	<.010	<.011	<.02	--	<.005	--	<.02	<.034	--
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	<.05	--	--	<.05	<.05	<.05	--	--	<.05
	11-04-03	--	<.05	--	--	<.05	<.05	<.05	--	--	<.05
		Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb, water, fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Tri-fluralin, water, fltrd 0.7u GF ug/L (82661)	Tri-fluralin, water, fltrd, ug/L (04023)	Vernolate, water, fltrd, ug/L (04034)	Xylene, water, unfltrd ug/L (81551)	1,1,1,2-Tetra-chloro-ethane, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, unfltrd ug/L (34506)	1,1,2,2-Tetra-chloro-ethane, unfltrd ug/L (34516)
CE Cd 89	10-01-03	<.02	<.005	<.002	<.009	--	--	--	<.03b	<.03b	<.16
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	--	--	--	<.05	<.05	<.2	--	--	--
	11-04-03	--	--	--	--	<.05	<.05	<.2	--	--	--

QUALITY OF GROUND WATER DATA
CECIL COUNTY, MARYLAND—Continued

Well Number	Date	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-bromo-methane water unfltrd ug/L (30217)	Di-chloro-di-fluoro-methane wat unfltrd ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl methac-rylate, water, unfltrd ug/L (73570)
CE Cd 89	10-01-03	<.2m	<.02n	<.05n	<.1n	<.05b	<.18m	<.1t	<.1t	<.10	<.2
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	--	--	--	--	--	--	--	--	--
	11-04-03	--	--	--	--	--	--	--	--	--	--
	Date	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethyl-benzene water unfltrd ug/L (34371)	Hexa-chloro-buta-diene, water, unfltrd ug/L (39702)	Hexa-chloro-ethane, water, unfltrd ug/L (34396)	Iodo-methane water unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)
CE Cd 89	10-01-03	<4.0	<.03b	<.1	<.1n	<.35m	<.4b	<.04n	<.8	<2.0	<.3
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	<.1	--	--	--	--	--	--	--	--
	11-04-03	--	<.1	--	--	--	--	--	--	--	--
	Date	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta-para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)
CE Cd 89	10-01-03	<.08b	<.06b	<.5	<.7b	<.1n	<.04b	<.04t	<.06b	<.04b	<.05b
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	<.2	--	--	--	--	<.1	--	--	--
	11-04-03	--	<.2	--	--	--	--	<.1	--	--	--
	Date	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, Surrog, Sch2090 wat unfltrd percent recovery (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unfltrd ug/L (73547)
CE Cd 89	10-01-03	<.2	<.06n	<.06b	<.06b	<2	E.01n	101	<.03b	<.09b	<.7b
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	E.1	--	--	--	--	<.1	85.0	--	--	--
	11-04-03	<.2	--	--	--	--	<.1	80.9	--	--	--

QUALITY OF GROUND WATER DATA

CECIL COUNTY, MARYLAND—Continued

Well Number	Date	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)	Alpha radio-activity 2-sigma Th-230, pCi/L (75987)	Alpha radio-activity water, fltrd, Th-230, pCi/L (04126)	Beta radio-activity 2-sigma wat flt pCi/L (75989)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)	Ra-228, water, fltrd, pCi/L (81366)
CE Cd 89	10-01-03	<.10b	<.04b	<.16	.15	<.1n	--	--	--	--	1
	10-01-03	--	--	--	--	--	--	--	--	--	--
CE Dd 102	11-04-03	--	--	--	--	--	1.1	3	.86	3	--
	11-04-03	--	--	--	--	--	1.1	3	.89	4	--

Well Number	Date	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)	Uranium natural water, fltrd, ug/L (22703)
CE Cd 89	10-01-03	16	70	E.03n
	10-01-03	--	--	--
CE Dd 102	11-04-03	--	--	--
	11-04-03	--	--	--

Remark codes used in this table:

- < -- Less than
- E -- Estimated value

Value qualifier codes used in this table:

- b -- Value extrapolated at low end
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

QUALITY OF GROUND WATER DATA

FREDERICK COUNTY, MARYLAND

Well Number	Date	Time	Station number	Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Sampling method, code (82398)
FR Dc 62	08-24-04	0802	392545077303201	Environmental	400CTCN	GW	642	700	4040
FR Dc 62 - finished water	08-24-04	0850	392545077303202	Finished water	--	SS	--	700	8030
FR Ec 43	08-23-04	1040	392157077314401	Environmental	400CTCN	GW	300	580	4040
FR Ec 43 - finished water	08-23-04	0935	392157077314402	Finished water	--	SS	--	580	8030
FR Ef 54	08-26-04	0915	392314077151301	Blank	300SMCK	GW	--	490	4040
	08-26-04	0950		Environmental	300SMCK	GW	--	490	4040
FR Ef 54 - finished water	08-26-04	0800	392314077151302	Finished water	--	SS	--	490	8030
FR Eg 36	08-25-04	1024	392157077102101	Environmental	300MRBG	GW	182	700	4040
FR Eg 36 - finished water	08-25-04	1114	392157077102102	Finished water	--	SS	--	700	8030
FR Eg 37	08-25-04	0852	392053077113601	Environmental	300MRBG	GW	95	760	4040
FR Eg 37 - finished water	08-25-04	0800	392053077113602	Finished water	--	SS	--	760	8030

	Date	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	2,4,5-T surrog, water, fltrd, percent recovery (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)
FR Dc 62	08-24-04	748	2.8	27	6.3	499	15.5	13.1	87.5	<.009	<.02
FR Dc 62 - finished water	08-24-04	748	2.8	27	8.6	737	16.5	13.2	87.6	<.009	<.02
FR Ec 43	08-23-04	747	4.7	46	6.6	607	20.5	13.4	--	--	--
FR Ec 43 - finished water	08-23-04	747	4.5	46	7.8	559	20.0	15.0	--	--	--
FR Ef 54	08-26-04	--	--	--	--	--	--	--	90.0	<.009	<.02
	08-26-04	755	8.5	81	7.5	319	21.5	12.5	90.3	<.009	<.02
FR Ef 54 - finished water	08-26-04	755	8.6	92	7.5	339	20.0	18.2	93.8	<.009	<.02
FR Eg 36	08-25-04	747	4.9	48	7.9	408	23.0	13.8	43.1	<.009	<.02
FR Eg 36 - finished water	08-25-04	747	4.8	48	8.4	419	22.5	14.0	104	<.009	<.02
FR Eg 37	08-25-04	747	6.8	65	5.2	155	19.5	12.9	--	--	--
FR Eg 37 - finished water	08-25-04	747	7.5	78	6.9	381	19.0	16.4	--	--	--

	Date	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy-carbo-furan, wat flt ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor ESA, water, fltrd ug/L (61029)	Aceto-chlor OA, water, fltrd ug/L (61030)	Aceto-chlor, water, fltrd, ug/L (49260)
FR Dc 62	08-24-04	<.02	--	E.13	E.02	E.005	<.006	<.014	<.02	<.02	--
FR Dc 62 - finished water	08-24-04	<.02	--	E.11	E.02	E.005	<.006	<.014	<.02	<.02	--
FR Ec 43	08-23-04	--	--	--	--	--	--	--	--	--	--
FR Ec 43 - finished water	08-23-04	--	--	--	--	--	--	--	--	--	--
FR Ef 54	08-26-04	<.02	<.006	<.006	<.01	<.008	<.006	<.014	<.02	<.02	<.006
	08-26-04	<.02	<.006	E.146	E.14	E.016	<.006	<.014	<.02	<.02	<.006
FR Ef 54 - finished water	08-26-04	<.02	<.006	E.073	E.06	E.020	<.006	<.014	<.02	<.02	<.006
FR Eg 36	08-25-04	<.02	--	E.02	E.02	<.008	<.006	<.014	<.02	<.02	--
FR Eg 36 - finished wa	08-25-04	<.02	--	E.08	E.03	<.008	<.006	<.014	<.02	<.02	--
FR Eg 37	08-25-04	--	--	--	--	--	--	--	--	--	--
FR Eg 37 - finished water	08-25-04	--	--	--	--	--	--	--	--	--	--

Geologic Unit (aquifer): 400CTCN - Catocin Metabasalt
 300SMCK - Sams Creek Metabasalt
 300MRBG - Marburg Formation

Station Type: GW - Ground Water
 SS - Specific course

Sampling Method: 8030 - Grab sample at water-supply tap

QUALITY OF GROUND WATER DATA

FREDERICK COUNTY, MARYLAND—Continued

Well Number	Date	Metola-	Metola-	Metri-	Metsul-	N-(4-	Neburon	Nico-	Norflur	Ory-	Oxamyl,
		chlor OA, water, fltrd 0.7u GF ug/L (61044)	chlor, water, fltrd, ug/L (39415)	buzin, water, fltrd, ug/L (82630)	furon, water, fltrd, ug/L (61697)	phenyl) -N- ¹ methyl- urea, ug/L (61692)	water, fltrd 0.7u GF ug/L (49294)	fulon, water, fltrd, ug/L (50364)	azon, water, fltrd, ug/L (49293)	zalin, water, fltrd 0.7u GF ug/L (49292)	water, fltrd 0.7u GF ug/L (38866)
FR Dc 62	08-24-04	<.02	--	--	<.03	<.02	<.01	<.01	<.02	<.02	<.01
FR Dc 62 - finished water	08-24-04	<.02	--	--	<.03	<.02	<.01	<.01	<.02	<.02	<.01
FR Ec 43	08-23-04	--	--	--	--	--	--	--	--	--	--
FR Ec 43 - finished water	08-23-04	--	--	--	--	--	--	--	--	--	--
FR Ef 54	08-26-04	<.02	<.013	<.006	<.03	<.02	<.01	<.01	<.02	<.02	<.01
	08-26-04	.46	E.004	<.006	<.03	<.02	<.01	<.01	<.02	<.02	<.01
FR Ef 54 - finished water	08-26-04	.45	E.005	<.006	E.10	<.02	<.01	<.01	<.02	<.02	<.01
FR Eg 36	08-25-04	.72	--	--	<.03	<.02	<.01	<.01	<.02	<.02	<.01
FR Eg 36 - finished water	08-25-04	.63	--	--	E.03	<.02	<.01	<.01	<.02	<.02	<.01
FR Eg 37	08-25-04	--	--	--	--	--	--	--	--	--	--
FR Eg 37 - finished water	08-25-04	--	--	--	--	--	--	--	--	--	--
Well Number	Date	Pendi-	Phorate	Pic-	Prome-	Prome-	Propy-	Propham	Propi-	Pro-	Siduron
		meth- alin, water, fltrd 0.7u GF ug/L (82683)	water fltrd 0.7u GF ug/L (82664)	loram, water, fltrd 0.7u GF ug/L (49291)	ton, water, fltrd, ug/L (04037)	tryn, water, fltrd, ug/L (04036)	zamide, water, fltrd 0.7u GF ug/L (82676)	water fltrd 0.7u GF ug/L (49236)	cona- zole, water, fltrd, ug/L (50471)	porur, water, fltrd 0.7u GF ug/L (38538)	water, fltrd, ug/L (38548)
FR Dc 62	08-24-04	--	--	<.02	--	--	--	<.010	<.02	<.008	<.02
FR Dc 62 - finished water	08-24-04	--	--	<.02	--	--	--	<.010	<.02	<.008	<.02
FR Ec 43	08-23-04	--	--	--	--	--	--	--	--	--	--
FR Ec 43 - finished water	08-23-04	--	--	--	--	--	--	--	--	--	--
FR Ef 54	08-26-04	<.022	<.011	<.02	<.01	<.005	<.004	<.010	<.02	<.008	<.02
	08-26-04	<.022	<.011	<.02	<.01	<.005	<.004	<.010	<.02	<.008	<.02
FR Ef 54 - finished water	08-26-04	<.022	<.011	<.02	<.01	<.005	<.004	<.010	<.02	<.008	<.02
FR Eg 36	08-25-04	--	--	<.02	--	--	--	<.010	<.02	<.008	<.02
FR Eg 36 - finished water	08-25-04	--	--	.15	--	--	--	<.010	<.02	<.008	<.02
FR Eg 37	08-25-04	--	--	--	--	--	--	--	--	--	--
FR Eg 37 - finished water	08-25-04	--	--	--	--	--	--	--	--	--	--
Well Number	Date	Sim-	Sulfo-	Tebu-	Terba-	Terbu-	Tri-	Tri-	1,1,1,2-	1,1,1-	1,1,2,2-
		azine, water, fltrd, ug/L (04035)	met- uron, water, fltrd, ug/L (50337)	thiuron water fltrd 0.7u GF ug/L (82670)	cil, water, fltrd, ug/L (04032)	fos, water, fltrd 0.7u GF ug/L (82675)	clopyr, water, fltrd 0.7u GF ug/L (49235)	flur- alin, water, fltrd 0.7u GF ug/L (82661)	flur- alin, water, unfltrd ug/L (77562)	chloro- ethane, water, unfltrd ug/L (34506)	chloro- ethane, water, unfltrd ug/L (34516)
FR Dc 62	08-24-04	--	<.009	<.006	<.010	--	<.02	--	<.03	E.03	<.16
FR Dc 62 - finished water	08-24-04	--	<.009	<.006	<.010	--	<.02	--	<.03	E.03	<.16
FR Ec 43	08-23-04	--	--	--	--	--	--	--	<.03	<.03	<.16
FR Ec 43 - finished water	08-23-04	--	--	--	--	--	--	--	<.03	<.03	<.16
FR Ef 54	08-26-04	<.005	<.009	<.02	<.010	<.02	<.02	<.009	<.03	<.03	<.16
	08-26-04	.047	<.009	<.02	<.010	<.02	<.02	<.009	<.03	<.03	<.16
FR Ef 54 - finished water	08-26-04	.044	<.009	<.02	<.010	<.02	<.02	<.009	<.03	<.03	<.16
FR Eg 36	08-25-04	--	<.009	.006	<.010	--	.03	--	<.03	<.03	<.16
FR Eg 36 - finished water	08-25-04	--	<.009	E.005	<.010	--	.03	--	<.03	<.03	<.16
FR Eg 37	08-25-04	--	--	--	--	--	--	--	<.03	<.03	<.16
FR Eg 37 - finished water	08-25-04	--	--	--	--	--	--	--	<.03	<.03	<.16

QUALITY OF GROUND WATER DATA
FREDERICK COUNTY, MARYLAND—Continued

Well Number	Date	CFC-113	1,1,2-	1,1-Di-	1,1-Di-	1,1-Di-	1,2,3,4	1,2,3,5	1,2,3-	1,2,3-	1,2,3-
		water unfltrd ug/L (77652)	Tri- chloro- ethane, water, unfltrd ug/L (34511)	chloro- ethane, water, unfltrd ug/L (34496)	chloro- ethene, water, unfltrd ug/L (34501)	chloro- propene water unfltrd ug/L (77168)	Tetra- methyl- benzene water unfltrd ug/L (49999)	Tetra- methyl- benzene water unfltrd ug/L (50000)	Tri- chloro- benzene water unfltrd ug/L (77613)	Tri- chloro- propane water unfltrd ug/L (77443)	Tri- methyl- benzene water unfltrd ug/L (77221)
FR Dc 62	08-24-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
FR Dc 62 - finished water	08-24-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
FR Ec 43	08-23-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
FR Ec 43 - finished water	08-23-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
FR Ef 54	08-26-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
	08-26-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
FR Ef 54 - finished water	08-26-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
FR Eg 36	08-25-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
FR Eg 36 - finished water	08-25-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
FR Eg 37	08-25-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
FR Eg 37 - finished water	08-25-04	<.04	<.06	<.04	<.02	<.03	<.1	<.1	<.3	<.18	<.1
Well Number	Date	1,2,4-	1,2,4-	Dibromo	1,2-Di-	1,2-Di-	1,2-Di-	1,2-Di-	1,2-Di-	1,3,5-	1,3-Di-
		Tri- chloro- benzene water unfltrd ug/L (34551)	Tri- methyl- benzene water unfltrd ug/L (77222)	chloro- propane water unfltrd ug/L (82625)	chloro- ethane, water, unfltrd ug/L (77651)	chloro- benzene water unfltrd ug/L (34536)	chloro- ethane, water, unfltrd ug/L (32103)	chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	chloro- propane water unfltrd ug/L (34541)	Tri- methyl- benzene water unfltrd ug/L (77226)	Di- chloro- benzene water unfltrd ug/L (34566)
FR Dc 62	08-24-04	<.1	<.06	<.5	<.04	<.05	<.1	117	<.03	<.04	<.03
FR Dc 62 - finished water	08-24-04	<.1	<.06	<.5	<.04	<.05	<.1	120	<.03	<.04	<.03
FR Ec 43	08-23-04	<.1	<.06	<.5	<.04	<.05	<.1	115	<.03	<.04	<.03
FR Ec 43 - finished water	08-23-04	<.1	<.06	<.5	<.04	<.05	<.1	117	<.03	<.04	<.03
FR Ef 54	08-26-04	<.1	<.06	<.5	<.04	<.05	<.1	102	<.03	<.04	<.03
	08-26-04	<.1	<.06	<.5	<.04	<.05	<.1	103	<.03	<.04	<.03
FR Ef 54 - finished water	08-26-04	<.1	<.06	<.5	<.04	<.05	<.1	105	<.03	<.04	<.03
FR Eg 36	08-25-04	<.1	<.06	<.5	<.04	<.05	<.1	117	<.03	<.04	<.03
FR Eg 36 - finished water	08-25-04	<.1	<.06	<.5	<.04	<.05	<.1	119	<.03	<.04	<.03
FR Eg 37	08-25-04	<.1	<.06	<.5	<.04	<.05	<.1	113	<.03	<.04	<.03
FR Eg 37 - finished water	08-25-04	<.1	<.06	<.5	<.04	<.05	<.1	114	<.03	<.04	<.03
Well Number	Date	1,3-Di-	1,4-Di-	14Bromo	2,2-Di-	2-	2-	3-	4-	4-Iso-	Acetone
		chloro- propane water unfltrd ug/L (77173)	chloro- benzene water unfltrd ug/L (34571)	fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	chloro- propane water unfltrd ug/L (77170)	Chloro- toluene water unfltrd ug/L (77275)	Ethyl- toluene water unfltrd ug/L (77220)	Chloro- propene water unfltrd ug/L (78109)	Chloro- toluene water unfltrd ug/L (77277)	propyl- toluene water unfltrd ug/L (77356)	water unfltrd ug/L (81552)
FR Dc 62	08-24-04	<.1	E.05	97.7	<.05	<.04	<.06	<.50	<.05	<.08	<.6
FR Dc 62 - finished water	08-24-04	<.1	E.04	98.1	<.05	<.04	<.06	<.50	<.05	<.08	<.6
FR Ec 43	08-23-04	<.1	<.03	94.6	<.05	<.04	<.06	<.50	<.05	<.08	<.6
FR Ec 43 - finished water	08-23-04	<.1	E.05	102	<.05	<.04	<.06	<.50	<.05	<.08	<.6
FR Ef 54	08-26-04	<.1	E.03	91.1	<.05	<.04	<.06	<.50	<.05	<.08	<.6
	08-26-04	<.1	E.03	89.0	<.05	<.04	<.06	<.50	<.05	<.08	<.6
FR Ef 54 - finished water	08-26-04	<.1	E.03	85.4	<.05	<.04	<.06	<.50	<.05	<.08	<.6
FR Eg 36	08-25-04	<.1	E.04	97.6	<.05	<.04	<.06	<.50	<.05	<.08	<.6
FR Eg 36 - finished water	08-25-04	<.1	E.04	101	<.05	<.04	<.06	<.50	<.05	<.08	<.6
FR Eg 37	08-25-04	<.1	E.04	98.1	<.05	<.04	<.06	<.50	<.05	<.08	<.6
FR Eg 37 - finished water	08-25-04	<.1	E.03	96.9	<.05	<.04	<.06	<.50	<.05	<.08	<.6

QUALITY OF GROUND WATER DATA

FREDERICK COUNTY, MARYLAND—Continued

Well Number	Date	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo-benzene water unfltrd ug/L (81555)	Bromo-chloro-methane water unfltrd ug/L (77297)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Bromo-ethene, water, unfltrd ug/L (50002)	Bromo-methane water unfltrd ug/L (34413)	Carbon di-sulfide water unfltrd ug/L (77041)	Chloro-benzene water unfltrd ug/L (34301)	Chloro-ethane, water, unfltrd ug/L (34311)
		FR Dc 62	08-24-04	<1	<.02	<.03	<.12	<.03	<.1	<.3	<.04	<.03	<.1
FR Dc 62 - finished water	08-24-04	<1	<.02	<.03	<.12	<.03	<.1	<.3	<.04	<.03	<.1
FR Ec 43	08-23-04	<1	<.02	<.03	<.12	<.03	<.1	<.3	<.04	<.03	<.1
FR Ec 43 - finished water	08-23-04	<1	<.02	<.03	<.12	<.03	<.1	<.3	<.04	<.03	<.1
FR Ef 54	08-26-04	<1	<.02	<.03	<.12	<.03	<.1	<.3	<.04	<.03	<.1
	08-26-04	<1	<.02	<.03	<.12	<.03	<.1	<.3	<.04	<.03	<.1
FR Ef 54 - finished water	08-26-04	<1	<.02	<.03	<.12	<.03	<.1	<.3	<.04	<.03	<.1
FR Eg 36	08-25-04	<1	<.02	<.03	<.12	.20	<.1	<.3	<.04	<.03	<.1
FR Eg 36 - finished water	08-25-04	<1	<.02	<.03	<.12	.19	<.1	<.3	<.04	<.03	<.1
FR Eg 37	08-25-04	<1	<.02	<.03	<.12	E.06	<.1	<.3	<.04	<.03	<.1
FR Eg 37 - finished water	08-25-04	<1	<.02	<.03	<.12	.36	<.1	<.3	<.04	<.03	<.1

Well Number	Date	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-bromo-methane water unfltrd ug/L (30217)	Di-chloro-di-fluoro-methane wat unf ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl methac-rylate, water, unfltrd ug/L (73570)
		FR Dc 62	08-24-04	<.2	<.02	<.05	<.1	<.05	<.18	<.1	<.1	<.10	<.2
FR Dc 62 - finished water	08-24-04	<.2	<.02	<.05	<.1	<.05	<.18	<.1	<.1	<.10	<.2
FR Ec 43	08-23-04	<.2	<.02	<.05	<.1	<.05	<.18	<.1	<.1	<.10	<.2
FR Ec 43 - finished water	08-23-04	<.2	<.02	<.05	<.1	<.05	<.18	<.1	<.1	<.10	<.2
FR Ef 54	08-26-04	<.2	<.02	<.05	<.1	<.05	<.18	<.1	<.1	<.10	<.2
	08-26-04	<.2	<.02	<.05	<.1	<.05	<.18	<.1	<.1	<.10	<.2
FR Ef 54 - finished water	08-26-04	<.2	<.02	<.05	.4	<.05	<.18	<.1	<.1	<.10	<.2
FR Eg 36	08-25-04	<.2	<.02	<.05	.4	<.05	<.18	<.1	<.1	<.10	<.2
FR Eg 36 - finished water	08-25-04	<.2	<.02	<.05	.4	<.05	<.18	<.1	<.1	<.10	<.2
FR Eg 37	08-25-04	<.2	<.02	<.05	<.1	<.05	<.18	<.1	<.1	<.10	<.2
FR Eg 37 - finished water	08-25-04	<.2	<.02	<.05	.2	<.05	<.18	<.1	<.1	<.10	<.2

Well Number	Date	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethyl-benzene water unfltrd ug/L (34371)	Hexa-chloro-buta-diene, water, unfltrd ug/L (39702)	Hexa-chloro-ethane, water, unfltrd ug/L (34396)	Iodo-methane water unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)
		FR Dc 62	08-24-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
FR Dc 62 - finished water	08-24-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
FR Ec 43	08-23-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
FR Ec 43 - finished water	08-23-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
FR Ef 54	08-26-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
	08-26-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
FR Ef 54 - finished water	08-26-04	<4.0	E.02	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
FR Eg 36	08-25-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
FR Eg 36 - finished water	08-25-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
FR Eg 37	08-25-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3
FR Eg 37 - finished water	08-25-04	<4.0	<.03	<.1	<.1	<.35	<.4	<.04	<.8	<2.0	<.3

QUALITY OF GROUND WATER DATA
FREDERICK COUNTY, MARYLAND—Continued

Well Number	Date	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene, water, unfltrd ug/L (77342)	n-propyl-benzene, water, unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene, water, unfltrd ug/L (77350)	Styrene, water, unfltrd ug/L (77128)	t-Butyl ether, water, unfltrd ug/L (50004)
FR Dc 62	08-24-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05
FR Dc 62 - finished water	08-24-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05
FR Ec 43	08-23-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05
FR Ec 43 - finished water	08-23-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05
FR Ef 54	08-26-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05
	08-26-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05
FR Ef 54 - finished water	08-26-04	<.08	E.09	<.5	<.7	<.1	<.04	E.03	<.06	<.04	<.05
FR Eg 36	08-25-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05
FR Eg 36 - finished water	08-25-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05
FR Eg 37	08-25-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05
FR Eg 37 - finished water	08-25-04	<.08	<.06	<.5	<.7	<.1	<.04	<.04	<.06	<.04	<.05

Well Number	Date	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene, water, unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane, water, unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene, water, unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090, wat unf percent recovry (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene, water, unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unf ug/L (73547)
FR Dc 62	08-24-04	<.2	<.06	E.04	<.06	<.2	<.05	97.2	<.03	<.09	<.7
FR Dc 62 - finished water	08-24-04	E.1	<.06	<.06	<.06	<.2	<.05	99.2	<.03	<.09	<.7
FR Ec 43	08-23-04	<.2	<.06	<.06	<.06	<.2	<.05	98.5	<.03	<.09	<.7
FR Ec 43 - finished water	08-23-04	<.2	<.06	<.06	<.06	<.2	<.05	100	<.03	<.09	<.7
FR Ef 54	08-26-04	<.2	<.06	<.06	<.06	<.2	E.03	99.2	<.03	<.09	<.7
	08-26-04	<.2	<.06	<.06	<.06	<.2	<.05	99.4	<.03	<.09	<.7
FR Ef 54 - finished water	08-26-04	<.2	<.06	<.06	<.06	<.2	<.05	99.7	<.03	<.09	<.7
FR Eg 36	08-25-04	E.2	<.06	<.06	<.06	<.2	<.05	98.9	<.03	<.09	<.7
FR Eg 36 - finished water	08-25-04	E.2	<.06	<.06	<.06	<.2	<.05	101	<.03	<.09	<.7
FR Eg 37	08-25-04	.2	<.06	<.06	<.06	<.2	<.05	98.2	<.03	<.09	<.7
FR Eg 37 - finished water	08-25-04	.2	<.06	<.06	<.06	<.2	<.05	97.7	<.03	<.09	<.7

Well Number	Date	Tri-bromo-methane, water, unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane, water, unfltrd ug/L (34488)	Tri-chloro-methane, water, unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FR Dc 62	08-24-04	<.10	<.04	<.16	1.06	<.1
FR Dc 62 - finished water	08-24-04	<.10	<.04	<.16	1.08	<.1
FR Ec 43	08-23-04	<.10	<.04	<.16	E.03	<.1
FR Ec 43 - finished water	08-23-04	<.10	<.04	<.16	E.05	<.1
FR Ef 54	08-26-04	<.10	<.04	<.16	<.02	<.1
	08-26-04	<.10	<.04	<.16	E.04	<.1
FR Ef 54 - finished water	08-26-04	.12	<.04	<.16	.57	<.1
FR Eg 36	08-25-04	.40	<.04	<.16	.14	<.1
FR Eg 36 - finished water	08-25-04	.42	<.04	<.16	E.08	<.1
FR Eg 37	08-25-04	<.10	<.04	<.16	.41	<.1
FR Eg 37 - finished water	08-25-04	E.08	<.04	<.16	.87	<.1

Remark codes used in this table:

< -- Less than
E -- Estimated value

HARFORD COUNTY, MARYLAND

Well Number	Date	Time	Station number		Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)		
HA Ec 46	01-29-04	1300	392408076210101		Environmental	217PTXN	GW	85	75	65		
	01-29-04	1301			Replicate	217PTXN	GW	85	75	65		
			Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	
	01-29-04	15.84	23.2	.80	115	4040	760	3.1	28	8.2	244	
	01-29-04	--	23.2	--	--	4040	--	--	--	--	--	
			Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)
	01-29-04	3.5	11.2	83	21.8	6.84	3.20	21.2	116	142	.16	
	01-29-04	--	--	--	--	--	--	--	--	--	--	
			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 water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L (00660)
	01-29-04	2.12	.2	28.4	5.7	162	153	.20	<.06	<.008	.239	
	01-29-04	--	--	--	--	--	--	--	--	--	--	
			Ortho-phosphate, water, fltrd, mg/L as P (00671)	Organic carbon, water, fltrd, mg/L (00681)	E coli, MI MF, water, col/100 mL (90901)	Total coliform, MI MF, water, col/100 mL (90900)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)
01-29-04	.078	.4	<1	<1	Mn	<.20	.6	51	<.06	51		
01-29-04	--	--	<1	<1	--	--	--	--	--	--		

Geologic Unit (aquifer): 217PTXN - Patuxent Formation

Station Type: GW - Ground Water

Sampling Method: 4040 - Submersible pump

QUALITY OF GROUND WATER DATA
HARFORD COUNTY, MARYLAND—Continued

Well Number	Date	Cadmium water, fltrd, ug/L (01025)	Chromium water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper water, fltrd, ug/L (01040)	Iron water, fltrd, ug/L (01046)	Lead water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese water, fltrd, ug/L (01056)	Molybdenum water, fltrd, ug/L (01060)	Nickel water, fltrd, ug/L (01065)
HA Ec 46	01-29-04 01-29-04	<.04	E.5n	6.80	E.3n	1,360	<.08	2.1	80.2	.8	6.69
	Date	Selenium water, fltrd, ug/L (01145)	Silver water, fltrd, ug/L (01075)	Strontium water, fltrd, ug/L (01080)	Thallium water, fltrd, ug/L (01057)	Vanadium water, fltrd, ug/L (01085)	Zinc water, fltrd, ug/L (01090)	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)
	01-29-04 01-29-04	<.4 --	<.2 --	141 --	<.04 --	.5 --	3.2 --	<.006 --	<.006 --	<.006 --	<.005 --
	Date	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)
	01-29-04 01-29-04	<.005 --	97.3 --	<.007 --	<.050 --	<.010 --	<.004 --	<.041 --	<.020 --	<.005 --	<.006 --
	Date	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog, wat flt 0.7u GF percent recovry (91063)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)
	01-29-04 01-29-04	<.018 --	<.003 --	<.005 --	115 --	<.009 --	<.02 --	<.004 --	<.009 --	<.005 --	<.003 --
	Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)
	01-29-04 01-29-04	<.004 --	<.035 --	<.027 --	<.015 --	<.013 --	<.006 --	<.003 --	<.007 --	<.003 --	<.010 --

QUALITY OF GROUND WATER DATA

HARFORD COUNTY, MARYLAND—Continued

Well Number	Date	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)
HA Ec 46	01-29-04 01-29-04	<.004 --	<.022 --	<.011 --	<.01 --	<.004 --	<.025 --	<.011 --	<.02 --	<.005 --	<.02 --
	Date	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2- Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2- Tetra- chloro- ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)
	01-29-04 01-29-04	<.034 --	<.02 --	<.010 --	<.002 --	<.009 --	<.03b --	E.02n --	<.16 --	<.04b --	E.08b --
	Date	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethane, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3,4 Tetra- methyl- benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra- methyl- benzene water unfltrd ug/L (50000)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,3- Tri- methyl- benzene water unfltrd ug/L (77221)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)
	01-29-04 01-29-04	<.04b --	<.02b --	<.03b --	<.1 --	<.1 --	<.3 --	<.18 --	<.1b --	<.1 --	<.06b --
	Date	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)
	01-29-04 01-29-04	<.5 --	<.04b --	<.05b --	<.1 --	140 --	<.03b --	<.04b --	<.03b --	<.1b --	E.02n --
	Date	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	2- Ethyl- toluene water unfltrd ug/L (77220)	3- Chloro- propene water unfltrd ug/L (78109)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylo- nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)
	01-29-04 01-29-04	89.1 --	<.05b --	<.04b --	<.06b --	<.50m --	<.05b --	<.08b --	<.6 --	<.1 --	<.02b --

QUALITY OF GROUND WATER DATA

HARFORD COUNTY, MARYLAND—Continued

Well Number	Date	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)	Ra-228, water, fltrd, pCi/L (81366)	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)	Uranium natural water, fltrd, ug/L (22703)
HA Ec 46	01-29-04 01-29-04	<.16 --	<.02b --	<.1b --	M --	18 --	100 --	.27 --

Remark codes used in this table:

- < -- Less than
- E -- Estimated value
- M-- Presence verified, not quantified

Value qualifier codes used in this table:

- b -- Value extrapolated at low end
- m-- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

QUALITY OF GROUND WATER DATA

KENT COUNTY, MARYLAND

Well Number	Date	Time	Sample type	Geologic unit	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
KE Bd 165	03-11-04	1500	Environmental	110ALVM	1028	80097	1.90	1.8	1.2	-.05
	05-19-04	1500	Environmental	110ALVM	1028	80097	1.90	1.8	1.2	-.03
	07-21-04	1500	Environmental	110ALVM	1028	80097	1.90	1.8	1.2	.13
	09-14-04	1230	Environmental	110ALVM	1028	80097	1.90	1.8	1.2	-.03
KE Bd 166	03-11-04	1700	Environmental	110ALVM	1028	80097	5.70	5.6	5.1	-.67
	05-18-04	1500	Environmental	110ALVM	1028	80097	5.70	5.6	5.1	-.67
KE Bd 167	07-21-04	1300	Environmental	110ALVM	1028	80097	5.70	5.6	5.1	-.64
	09-14-04	1030	Environmental	110ALVM	1028	80097	5.70	5.6	5.1	-.55
	03-11-04	1400	Environmental	110ALVM	1028	80097	8.30	8.2	7.7	-1.39
	03-11-04	1430	Replicate	110ALVM	1028	80020	8.30	--	--	--
	05-19-04	1330	Environmental	110ALVM	1028	80097	8.30	8.2	7.7	-1.35
KE Bd 168	07-21-04	1430	Environmental	110ALVM	1028	80097	8.30	8.2	7.7	-1.17
	09-14-04	1600	Environmental	110ALVM	1028	80097	8.30	8.2	7.7	-.98
	03-09-04	1730	Environmental	110ALVM	1028	80020	10.70	11	10	.67
	05-18-04	1200	Environmental	110ALVM	1028	80097	10.70	11	10	-1.39
	07-21-04	1200	Environmental	110ALVM	1028	80097	10.70	11	10	1.07
KE Bd 171	09-14-04	1400	Environmental	110ALVM	1028	80097	10.70	11	10	-.98
	10-09-03	1300	Core material	125AQUI	1028	80020	39.00	35	33	--
	03-10-04	1130	Environmental	125AQUI	1028	80097	39.00	39	34	34.22
	05-19-04	1015	Environmental	125AQUI	1028	80097	39.00	39	34	34.55
KE Bd 172	10-09-03	1300	Core material	125AQUI	1028	80020	50.00	50	48	--
	03-10-04	1340	Environmental	125AQUI	1028	80097	50.00	50	47	34.36
	05-19-04	1250	Environmental	125AQUI	1028	80097	50.00	50	47	34.45
	07-15-04	0925	Environmental	125AQUI	1028	80097	50.00	50	47	35.25
	09-29-04	1130	Environmental	125AQUI	1028	80097	50.00	50	47	36.24
KE Bd 173	10-11-03	1300	Core material	125AQUI	1028	80020	61.50	60	58	--
	03-10-04	1555	Environmental	125AQUI	1028	80097	61.50	62	58	34.24
	05-19-04	1555	Environmental	125AQUI	1028	80097	61.50	62	58	34.58
	07-15-04	1035	Environmental	125AQUI	1028	80097	61.50	62	58	35.14
	09-29-04	1000	Environmental	125AQUI	1028	80097	61.50	62	58	36.11
KE Bd 174	10-21-03	1300	Core material	125AQUI	1028	80020	27.00	26	24	--
	03-11-04	1015	Environmental	125AQUI	1028	80097	27.00	27	24	20.33
	05-25-04	0945	Environmental	125AQUI	1028	80020	27.00	27	24	20.48
	07-14-04	1005	Environmental	125AQUI	1028	80097	27.00	27	24	23.32
	09-22-04	1400	Environmental	125AQUI	1028	80097	27.00	27	24	21.96

Geologic Unit (aquifer): 110ALVM - Quaternary Alluvium

125AQUI - Aquia Formation

Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80097 - USGS-Carbon Research Lab, Boulder, CO

80020 - USGS-National Water Quality Lab, Denver, CO

QUALITY OF GROUND WATER DATA

KENT COUNTY, MARYLAND—Continued

Well Number	Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling depth, feet (00003)	Sampling method, code (82398)	Turbidity white light, det ang 90+/-30 corrcrtd NTRU (63676)	UV absorbance, 254 nm, wat flt units /cm (50624)	SUVA, 254 nm, abs units/mgC/L /meter (63162)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
KE Bd 165	03-11-04	.12	60	1.50	4080	2.0	.011	1.4	767	8.1	71
	05-19-04	.12	75	--	4080	--	.008	.9	--	7.7	--
	07-21-04	.14	70	1.50	4080	--	.014	1.5	767	--	--
	09-14-04	.15	45	1.50	4080	.7	.012	1.4	767	3.5	36
KE Bd 166	03-11-04	.17	30	5.30	4080	2.0	.008	1.6	767	8.4	76
	05-18-04	.17	45	5.25	4080	2.0	.008	1.5	767	8.5	80
KE Bd 167	07-21-04	.17	50	5.35	4080	--	.006	1.4	767	9.0	94
	09-14-04	.13	60	5.35	4080	.4	.008	1.7	767	8.1	81
	03-11-04	.17	56	7.90	4080	1.0	.009	2.0	767	9.4	87
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	.12	60	7.90	4080	1.4	.003	.7	--	9.5	--
KE Bd 168	07-21-04	--	60	7.90	4080	--	.007	1.9	--	--	--
	09-14-04	.14	45	8.05	4080	1.0	.007	1.2	767	9.2	91
	03-09-04	.18	30	10.3	4080	--	--	--	767	11.0	104
	05-18-04	.15	55	8.10	4080	--	.006	1.1	767	9.0	85
	07-21-04	.15	50	10.5	4080	--	.007	1.9	--	9.0	--
KE Bd 171	09-14-04	.13	40	10.4	4080	--	.007	1.5	767	9.0	87
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	.21	45	37.0	4040	1.2	.006	.9	772	3.0	28
	05-19-04	.18	70	38.0	4040	1.0	.007	1.2	769	3.5	34
KE Bd 172	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	.28	45	--	4040	--	.008	1.7	772	7.0	66
	05-19-04	.18	45	51.0	4040	<1	.008	1.7	771	8.0	78
	07-15-04	.20	40	48.5	4040	1.4	.008	1.9	756	8.7	88
	09-29-04	.17	70	47.0	4040	--	.006	1.2	761	8.6	85
KE Bd 173	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	.50	120	58.5	4040	--	.006	1.8	722	3.9	39
	05-19-04	.21	80	61.0	4040	2.0	.002	.5	770	8.0	79
	07-15-04	.21	40	59.5	4040	1.1	.007	2.1	756	8.4	85
	09-29-04	.12	95	58.5	4040	13	.006	1.4	761	7.8	78
KE Bd 174	10-21-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	.28	40	--	4040	1.0	.009	2.6	769	8.9	85
	05-25-04	--	--	--	--	--	--	--	--	--	--
	07-14-04	.15	30	25.5	4040	.8	.016	2.8	758	8.8	92
	09-22-04	.16	83	26.0	4040	--	.006	1.2	772	7.4	80

Sampling Method: 4080 - Peristaltic pump
 4040 - Submersible pump

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)
KE Bd 165	03-11-04	4.6	116	9.0	10.0	47	8.94	5.95	1.91	2.88	<1
	05-19-04	4.4	162	--	16.0	48	10.1	5.64	2.24	2.40	1
	07-21-04	4.5	154	--	19.0	54	10.7	6.62	2.41	2.56	<1
	09-14-04	4.5	166	24.0	17.0	52	10.2	6.47	2.42	2.68	1
KE Bd 166	03-11-04	4.7	134	10.0	11.0	54	11.8	5.93	2.32	4.05	<1
	05-18-04	4.7	165	30.0	13.0	48	11.3	4.74	2.36	3.98	2
KE Bd 167	07-21-04	4.7	141	--	18.0	52	12.3	5.09	2.54	4.45	1
	09-14-04	4.5	767	24.0	15.5	52	12.4	5.11	2.61	4.40	2
	03-11-04	4.8	157	14.0	12.0	65	15.3	6.44	3.12	5.48	2
	03-11-04	--	--	--	--	65	15.4	6.40	3.07	5.53	--
	05-19-04	4.9	203	--	13.0	62	15.2	5.83	3.01	5.41	3
KE Bd 168	07-21-04	4.9	171	--	17.0	66	16.4	6.16	3.21	5.84	2
	09-14-04	4.7	192	25.0	15.0	61	14.6	5.90	3.05	5.10	2
	03-09-04	5.0	195	8.0	13.0	65	15.7	6.24	3.13	5.28	2
	05-18-04	4.8	191	--	13.0	60	14.8	5.51	2.99	4.84	--
	07-21-04	5.0	151	--	15.0	57	14.1	5.31	2.91	4.81	3
KE Bd 171	09-14-04	4.8	163	24.0	14.0	53	13.0	5.02	2.94	4.47	3
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	4.9	124	9.0	13.0	36	8.83	3.42	3.40	4.18	5
	05-19-04	4.5	133	24.0	15.0	39	10.4	3.26	3.27	4.86	5
KE Bd 172	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	5.2	179	9.0	13.0	62	16.4	5.13	3.50	3.78	6
	05-19-04	5.0	179	24.0	15.0	61	16.6	4.68	3.64	3.78	5
	07-15-04	5.0	181	24.0	15.8	62	16.9	4.80	3.32	3.40	4
	09-29-04	4.8	182	20.5	15.0	60	15.7	4.96	3.34	3.19	2
KE Bd 173	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	5.0	194	9.0	13.0	62	13.8	6.58	4.04	5.09	5
	05-19-04	4.8	194	22.0	15.0	60	13.9	6.17	4.20	5.31	3
	07-15-04	4.8	194	26.0	15.8	60	13.9	6.15	3.87	4.99	2
	09-29-04	4.8	192	20.0	15.4	56	12.5	5.97	3.81	4.85	2
KE Bd 174	10-21-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	4.9	115	10.0	13.5	36	8.67	3.43	2.80	2.75	4
	05-25-04	--	--	--	--	31	7.75	2.85	2.74	2.69	--
	07-14-04	4.5	111	31.5	17.1	30	7.61	2.75	2.55	2.50	2
	09-22-04	4.6	111	29.5	20.1	32	8.15	2.92	2.82	2.77	3

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, field, mg/L (99113)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, field, mg/L as N (99121)
KE Bd 165	03-11-04	<1	E.01n	7.80	<.2	9.33	21.0	22.6	81	<.04	9.4
	05-19-04	2	<.02	7.97	<.2	9.54	--	17.7	100	<.04	--
	07-21-04	M	.02	8.01	<.2	9.85	--	26.4	93	<.04	--
	09-14-04	1	.02	8.84	<.2	10.1	--	20.0	95	<.04	--
KE Bd 166	03-11-04	<1	E.01n	12.6	<.2	11.1	1.00	5.5	106	<.04	12
	05-18-04	2	E.02n	12.6	<.2	11.5	27.0	2.9	116	<.04	16
KE Bd 167	07-21-04	2	<.08	13.3	<.2	12.3	<1	2.0	121	<.04	12
	09-14-04	2	.03	13.4	<.2	12.7	--	.8	122	<.04	--
	03-11-04	2	.02	15.4	<.2	12.6	1.00	.4	118	<.04	20
	03-11-04	--	.02	15.7	<.2	12.4	--	.4	123	<.04	--
	05-19-04	4	.03	16.2	<.2	12.2	--	.4	175	<.04	--
KE Bd 168	07-21-04	3	.03	16.4	<.2	12.9	--	.3	173	<.04	--
	09-14-04	2	.02	14.9	<.2	13.0	--	.4	145	<.04	--
	03-09-04	2	.02	15.9	<.2	12.3	1.00	.2	133	<.04	14
	05-18-04	--	.02	15.4	<.2	12.4	--	E.1n	162	<.04	--
	07-21-04	4	.02	14.5	<.2	12.8	--	<.2	126	<.04	--
KE Bd 171	09-14-04	4	.02	14.0	<.2	13.0	--	<.2	133	<.04	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	6	.02	22.7	<.2	8.47	<.1	.3	75	<.04	<1
	05-19-04	6	.03	26.0	<.2	8.43	--	E.1n	106	<.04	--
KE Bd 172	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	7	E.01n	8.42	<.2	9.23	<1	1.4	127	<.04	14
	05-19-04	6	.02	8.67	<.2	9.41	--	1.1	143	<.04	--
	07-15-04	5	.02	8.78	<.2	9.24	--	.8	150	<.04	--
KE Bd 173	09-29-04	3	.02	8.70	<.2	9.61	--	.7	143	<.04	--
	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	6	.02	17.9	<.2	9.82	<1	.8	125	<.04	9.5
	05-19-04	4	.02	18.3	<.2	9.99	--	.4	146	<.04	--
	07-15-04	4	.02	18.6	<.2	9.74	--	.3	148	<.04	--
KE Bd 174	09-29-04	3	.03	18.4	<.2	10.1	--	.3	135	<.04	--
	10-21-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	5	E.01n	11.1	<.2	11.1	7.50	3.0	72	<.04	7.5
	05-25-04	--	E.01n	11.0	<.2	11.3	--	3.2	82	<.04	--
	07-14-04	3	E.01n	10.8	<.2	10.9	--	2.2	72	<.04	--
09-22-04	4	<.02	10.4	<.2	12.8	--	1.5	89d	<.04	--	

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Total nitrogen, wat flt by anal ysis, mg/L (62854)	Organic carbon, water, fltrd, mg/L (00681)	Iron (II), water, fltrd, field, mg/L (99114)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)
KE Bd 165	03-11-04	8.71d	<.008	<.006	8.77d	.8	.010	E4n	19.0	--	--
	05-19-04	9.18d	<.008	<.006	8.89d	.9	--	E5n	21.4	<.09	<.006
	07-21-04	9.44d	<.008	<.006	10.0d	.9	--	E4n	32.1	--	--
	09-14-04	9.34d	<.008	<.006	9.18d	.8	--	9	36.2	<.09	<.006
KE Bd 166	03-11-04	11.8d	<.008	<.006	11.4d	.5	.010	<6	11.4	--	--
	05-18-04	9.55d	<.008	<.006	11.0d	.5	<.010	<6c	9.0	<.09	<.006
	07-21-04	11.6d	<.008	<.006	12.1d	.4	<.010	<6	9.3	--	--
	09-14-04	12.6d	<.008	<.006	12.5d	.5	--	<6	8.9	--	--
KE Bd 167	03-11-04	15.7d	<.008	E.005n	15.2d	.5	.010	<6	9.6	--	--
	03-11-04	16.0d	<.008	.006	15.0d	--	--	<6	9.4	--	--
	05-19-04	16.9d	<.008	.006	15.4d	.4	--	<6c	9.1	<.09	<.006
	07-21-04	16.0d	<.008	.008	17.0d	.4	--	<6	10.0	--	--
KE Bd 168	09-14-04	15.0d	<.008	.006	14.8d	.6	--	<6	9.0	--	--
	03-09-04	14.5d	<.008	<.006	15.8d	--	.010	<6	38.2	--	--
	05-18-04	12.7d	<.008	<.006	14.1d	.5	--	<6c	23.4	<.09	<.006
	07-21-04	13.2d	<.008	E.003n	13.7d	.4	--	<6	20.4	--	--
KE Bd 171	09-14-04	13.3d	<.008	<.006	12.8d	.4	--	<6	17.4	--	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	3.62	<.008	<.006	3.68	.7	.010	9	11.5	--	--
	05-19-04	3.89	<.008	<.006	4.00	.6	--	11	7.4	<.09	<.006
KE Bd 172	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	15.7d	<.008	<.006	16.2d	.5	.030	9	15.2	--	--
	05-19-04	13.5d	<.008	<.006	15.0d	.5	--	E6n	13.6	<.09	<.006
	07-15-04	15.0d	<.008	<.006	15.8d	.4	--	E6n	10.8	--	--
KE Bd 173	09-29-04	16.0d	<.008	<.006	15.4d	.5	--	E6n	10.1	<.09	<.006
	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	14.2d	<.008	<.006	13.6d	.3	.170	E6n	17.1	--	--
	05-19-04	12.0d	<.008	<.006	13.7d	.5	--	7	16.4	<.18	<.024
KE Bd 174	07-15-04	13.1d	<.008	<.006	12.7d	.3	--	8	14.9	--	--
	09-29-04	13.6d	<.008	<.006	13.6d	.4	--	18	16.3	<.09	<.006
	10-21-03	--	--	--	--	--	--	--	--	--	--
KE Bd 174	03-11-04	6.87d	<.008	<.006	6.72d	.3	.010	7	14.8	--	--
	05-25-04	6.57d	E.006n	<.006	6.45d	--	--	8	13.1	<.09	<.006
	07-14-04	6.37d	<.008	<.006	6.33d	.6	--	7	10.3	--	--
	09-22-04	6.24d	<.008	<.006	6.51d	.5	--	9	9.6	<.09	<.006

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	2-[(2-Ethyl-6methylphenyl)amino]2 oxoESA ug/L (62850)	2Chloro-2,6'-diethylacetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	4Chloro-2methyl phenol, water, fltrd, ug/L (61633)	Aceto-chlor ESA, water, fltrd 0.7u GF ug/L (61029)	Aceto-chlor OA, water, fltrd 0.7u GF ug/L (61030)	Aceto-chlor SAA, water, fltrd, ug/L (62847)	Aceto-chlor, water, fltrd, ug/L (49260)
KE Bd 165	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	--	<.005	E.163	<.004	<.004	<.006	--	--	--	<.006
	07-21-04	--	--	--	--	--	--	--	--	--	--
KE Bd 166	09-14-04	--	<.005	E.149	<.004	<.004	<.006	--	--	--	<.006
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	.03	<.005	E.242	<.004	<.004	<.006	<.02	<.02	<.02	<.006
KE Bd 167	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 168	05-19-04	--	<.005	E.185	<.004	<.004	<.006	--	--	--	<.006
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	.07	<.005	E.172	<.004	<.004	<.006	<.02	<.02	<.02	<.006
KE Bd 171	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	--	<.005	E.154	<.004	<.004	<.006	--	--	--	<.006
KE Bd 172	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	--	<.005	E.482	<.004	<.004	<.006	--	--	--	<.006
	07-15-04	--	--	--	--	--	--	--	--	--	--
KE Bd 173	09-29-04	<.02	<.005	E.398	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	--	<.005	<.012	<.018	<.018	<.022	--	--	--	<.006
	07-15-04	--	--	--	--	--	--	--	--	--	--
KE Bd 174	09-29-04	<.02	<.005	<.006	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	10-21-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.02	<.005	E.504	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	07-14-04	--	--	--	--	--	--	--	--	--	--
09-22-04	--	<.005	E.437	<.004	<.004	<.006	--	--	--	<.006	

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Ala-chlor ESA SA, water, fltrd, ug/L (62849)	Ala-chlor ESA, water, fltrd 0.7u GF ug/L (50009)	Ala-chlor OA, water, fltrd 0.7u GF ug/L (61031)	Ala-chlor SAA, water, fltrd, ug/L (62848)	Ala-chlor, water, fltrd, ug/L (46342)	alpha- HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atra- zine, wat flt immuno- assay unadj. ug/L (99775)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl oxon, water, fltrd, ug/L (61635)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)
KE Bd 165	03-11-04	--	--	--	--	--	--	.32	--	--	--
	05-19-04	--	--	--	--	<.005	84.2	--	.018	<.02	<.050
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	<.005	86.1	--	.011	<.07	<.050
KE Bd 166	03-11-04	--	--	--	--	--	--	.16	--	--	--
	05-18-04	<.02	.02	<.02	<.02	<.005	75.2	--	<.007	<.06	<.050
	07-21-04	--	--	--	--	--	--	--	--	--	--
KE Bd 167	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	.09	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 168	05-19-04	--	--	--	--	<.005	82.9	--	<.007	<.02	<.050
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	.18	--	--	--
	05-18-04	<.02	.02	<.02	<.02	<.005	77.8	--	<.007	<.05	<.050
KE Bd 171	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	.18	--	--	--
	05-19-04	--	--	--	--	<.005	94.2	--	E.003t	<.03	<.050
KE Bd 172	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	--	--	--	--	<.020	84.0	--	<.007	<.06	<.050
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.02	.25	<.02	<.02	<.005	72.4	--	<.007	<.07	<.050
KE Bd 173	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	.07	--	--	--
	05-19-04	--	--	--	--	<.005	80.8	--	<.007	<.02	<.050
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.02	.62	<.02	<.02	<.005	72.7	--	<.007	<.07	<.050
KE Bd 174	10-21-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	.21	--	--	--
	05-25-04	<.02	<.02	<.02	<.02	<.005	70.0	--	.008	<.03c	<.050
	07-14-04	--	--	--	--	--	--	--	--	--	--
	09-22-04	--	--	--	--	<.005	74.3	--	E.003t	<.07	<.050

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	Ben-flur-alin, water, fltrd 0.7u GF (82673)	Car-baryl, water, fltrd 0.7u GF (82680)	Chlor-pyri-fos oxon, water, fltrd, ug/L (61636)	Chlor-pyri-fos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF (82687)	Cyflu-thrin, water, fltrd, ug/L (61585)	Cyper-methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF (82682)	Desulf-inyl fip-ro-nil, water, fltrd, ug/L (62170)	Diaz-inon oxon, water, fltrd, ug/L (61638)
KE Bd 165	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-21-04	--	--	--	--	--	--	--	--	--	--
KE Bd 166	09-14-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 167	05-18-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 168	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
KE Bd 171	05-18-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
KE Bd 172	05-19-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
KE Bd 173	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
KE Bd 174	05-19-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	10-21-03	--	--	--	--	--	--	--	--	--	--
KE Bd 174	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-14-04	--	--	--	--	--	--	--	--	--	--
	09-22-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	CFC-12, water, unfltrd undr N2 pg/kg (50282)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)
KE Bd 165	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.005	78.8	--	<.08	<.009	--	--	--	<.006	<.03
	07-21-04	--	--	--	--	--	--	--	--	--	--
KE Bd 166	09-14-04	<.005	60.2	--	<.08	<.009	--	--	--	<.006	<.0020
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.005	62.8	--	<.08	<.009	<.02	<.02	<.02	<.006	<.03
KE Bd 167	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 168	05-19-04	<.005	75.9	--	<.08	<.009	--	--	--	<.006	<.03
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
KE Bd 171	05-18-04	<.005	63.1	--	<.08	<.009	<.02	<.02	<.02	<.006	<.03
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	2,000	--	--	--	--	--	--	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
KE Bd 172	05-19-04	<.005	94.9	--	<.08	<.009	--	--	--	<.006	<.03
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.005	98.3	--	<.08	<.009	--	--	--	<.006	<.03
KE Bd 173	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.005	90.0	--	<.08	<.009	<.02	<.02	<.02	<.006	<.0020
	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
KE Bd 174	05-19-04	<.005	89.4	--	<.08	<.009	--	--	--	<.006	<.03
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.005	87.4	--	<.08	<.009	<.02	<.02	<.02	<.006	<.0020
	10-21-03	--	--	--	--	--	--	--	--	--	--
KE Bd 174	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.005	64.4	--	<.08	<.009	<.02	<.02	<.02	<.006	<.03
	07-14-04	--	--	--	--	--	--	--	--	--	--
	09-22-04	<.005	88.1	--	<.08	<.009	--	--	--	<.006	<.0020

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Ethion, water, fltrd, ug/L (82346)	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenami-phos sulf-oxide, water, fltrd, ug/L (61646)	Fenami-phos, water, fltrd, ug/L (61591)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flufen-acet ESA, water, fltrd, ug/L (61952)	Flufe-nacet OA, water, fltrd, ug/L (62483)
KE Bd 165	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--
	07-21-04	--	--	--	--	--	--	--	--	--	--
KE Bd 166	09-14-04	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 167	05-18-04	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 168	05-19-04	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02
KE Bd 171	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--
KE Bd 172	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02
KE Bd 173	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02
KE Bd 174	10-21-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.004	<.030c	--u	<.03	<.029	<.013	<.024	<.016	<.02	<.02
	07-14-04	--	--	--	--	--	--	--	--	--	--
	09-22-04	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Flufenacet, water, fltrd, ug/L (62481)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Ipro-dione, water, fltrd, ug/L (61593)	Isofen-phos, water, fltrd, ug/L (61594)	Mala-oxon, water, fltrd, ug/L (61652)	Mala-thion, water, fltrd, ug/L (39532)	Meta-laxyl, water, fltrd, ug/L (61596)	Methi-althion water, fltrd, ug/L (61598)
KE Bd 165	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	--	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006
	07-21-04	--	--	--	--	--	--	--	--	--	--
KE Bd 166	09-14-04	--	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006
KE Bd 167	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 168	05-19-04	--	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
KE Bd 171	05-18-04	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
KE Bd 172	05-19-04	--	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
KE Bd 173	05-19-04	--	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006
	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
KE Bd 174	05-19-04	--	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006
	10-21-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 174	05-25-04	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006
	07-14-04	--	--	--	--	--	--	--	--	--	--
	09-22-04	--	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006
	09-22-04	--	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	Methyl paraxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd, 0.7u GF ug/L (82667)	Metolachlor ESA, water, fltrd, 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd, 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd, 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd, 0.7u GF ug/L (82664)
KE Bd 165	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.03	<.015	--	--	<.013	<.006	<.008	<.022	<.10	<.011
	07-21-04	--	--	--	--	--	--	--	--	--	--
KE Bd 166	09-14-04	<.03	<.015	--	--	<.013	<.006	<.008	<.022	<.10	<.011
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 167	05-18-04	<.03	<.015	7.48	1.04	<.013	<.006	<.008	<.022	<.10	<.011
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 168	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.03	<.015	--	--	<.013	<.006	<.008	<.022	<.10	<.011
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
KE Bd 171	05-18-04	<.03	<.015	9.09	.99	<.013	<.006	<.008	<.022	<.10	<.011
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
KE Bd 172	05-19-04	<.03	<.015	--	--	E.002t	<.006	<.008	<.022	<.10	<.011
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.03	<.015	--	--	E.005t	<.008	<.020	<.022	<.10	<.011
KE Bd 173	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.03	<.015	15.7	1.23	<.013	<.006	<.008	<.022	<.10	<.011
	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
KE Bd 174	05-19-04	<.03	<.015	--	--	<.013	<.006	<.008	<.022	<.20	<.011
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.03	<.015	8.84	<.02	<.013	<.006	<.008	<.022	<.10	<.011
	10-21-03	--	--	--	--	--	--	--	--	--	--
KE Bd 174	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.03	<.015	1.84	1.48	E.003t	<.010	<.008	<.022	<.10	<.011
	07-14-04	--	--	--	--	--	--	--	--	--	--
	09-22-04	<.03	<.015	--	--	<.013	<.006	<.008	<.022	<.10	<.011

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propy-zamide, water, fltrd, 0.7u GF ug/L (82676)	Propa-chlor ESA, water, fltrd, 0.7u GF ug/L (62766)	Propa-chlor OA, water, fltrd, 0.7u GF ug/L (62767)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd, 0.7u GF ug/L (82670)	Ter-bufos oxon sulfone water, fltrd, ug/L (61674)
KE Bd 165	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.06	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07
	07-21-04	--	--	--	--	--	--	--	--	--	--
KE Bd 166	09-14-04	<.05	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 167	05-18-04	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 168	05-19-04	<.06	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07
KE Bd 171	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.06	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07
KE Bd 172	10-09-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.06	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07
	07-15-04	--	--	--	--	--	--	--	--	--	--
KE Bd 173	09-29-04	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07
	10-11-03	--	--	--	--	--	--	--	--	--	--
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.06	<.008	<.01	<.005	<.004	--	--	<.005	<.03	<.07
	07-15-04	--	--	--	--	--	--	--	--	--	--
KE Bd 174	09-29-04	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07
	10-21-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	--u	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07
	07-14-04	--	--	--	--	--	--	--	--	--	--
	09-22-04	<.05	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	Terbu- fos, water, fltrd 0.7u GF (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Tri- flur- alin, water, fltrd 0.7u GF (82661)	1-Naph- thol, solids, ug/kg (63240)	2,6-Di- ethyl- aniline solids, ug/kg (63243)	2Chloro -2,6-' diethyl acet- anilide solids, ug/kg (63246)	2-Ethyl -6- methyl- aniline solids, ug/kg (63247)	3,4-Di- chloro- aniline solids, ug/kg (63248)	4- Chloro- 2- methyl- phenol, solids, ug/kg (63255)	Aceto- chlor, solids, ug/kg (63257)
KE Bd 165	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.02	<.01	<.009	--	--	--	--	--	--	--
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	<.02	<.01	<.009	--	--	--	--	--	--	--
KE Bd 166	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.02	<.01	<.009	--	--	--	--	--	--	--
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
KE Bd 167	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Bd 168	05-19-04	<.02	<.01	<.009	--	--	--	--	--	--	--
	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.02	<.01	<.009	--	--	--	--	--	--	--
KE Bd 171	07-21-04	--	--	--	--	--	--	--	--	--	--
	09-14-04	--	--	--	--	--	--	--	--	--	--
	10-09-03	--	--	--	<10m	<30m	<1	<30m	<75m	<10m	<1
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.02	<.01	<.009	--	--	--	--	--	--	--
KE Bd 172	10-09-03	--	--	--	<10m	<30m	<1	<30m	<75m	<10m	<1
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.02	<.01	<.009	--	--	--	--	--	--	--
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.02	<.01	<.009	--	--	--	--	--	--	--
KE Bd 173	10-11-03	--	--	--	<10m	<30m	<1	<30m	<75m	<10m	<1
	03-10-04	--	--	--	--	--	--	--	--	--	--
	05-19-04	<.02	<.01	<.009	--	--	--	--	--	--	--
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-29-04	<.02	<.01	<.009	--	--	--	--	--	--	--
KE Bd 174	10-21-03	--	--	--	<10m	<30m	<1	<30m	<75m	<10m	<1
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.02	<.01	<.009	--	--	--	--	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
	09-22-04	<.02	<.01	<.009	--	--	--	--	--	--	--

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	Trifluor alin, solids, ug/kg (63390)	Di- chlor- vos, water fltrd, ug/L (38775)	Sampler type, code (84164)
KE Bd 165	03-11-04	--	--	4080
	05-19-04	--	<.01	4080
	07-21-04	--	--	4080
	09-14-04	--	<.01	4080
KE Bd 166	03-11-04	--	--	4080
	05-18-04	--	<.01	4080
	07-21-04	--	--	4080
	09-14-04	--	--	4080
KE Bd 167	03-11-04	--	--	4080
	03-11-04	--	--	--
	05-19-04	--	<.01	4080
	07-21-04	--	--	4080
KE Bd 168	09-14-04	--	--	4080
	03-09-04	--	--	4080
	05-18-04	--	<.01	4080
	07-21-04	--	--	4080
KE Bd 171	09-14-04	--	--	--
	10-09-03	<1	--	8010
	03-10-04	--	--	4040
KE Bd 172	05-19-04	--	<.01	4040
	07-15-04	--	--	4040
	09-29-04	--	<.01	4040
	10-09-03	<1	--	8010
KE Bd 173	03-10-04	--	--	4040
	05-19-04	--	<.02	4040
	07-15-04	--	--	4040
	09-29-04	--	<.01	4040
	10-11-03	<1	--	8010
KE Bd 174	03-11-04	--	--	4040
	05-25-04	--	<.01	--
	07-14-04	--	--	4040
	09-22-04	--	<.01	4045
	10-21-03	<1	--	--

Sampling Type: 4080 - Peristaltic pump
 8010 - Other
 4040 - Submersible pump
 4045 - Submersible multiple impeller (turbine) pump

QUALITY OF GROUND WATER DATA

KENT COUNTY, MARYLAND—Continued

Well Number	Date	Time	Sample type	Geologic unit	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
KE Bd 175	10-22-03	1300	Core material	125AQUI	1028	80020	35.00	34	32	--
	03-11-04	1145	Environmental	125AQUI	1028	80097	35.00	35	32	20.40
	03-11-04	1146	Replicate	125AQUI	1028	80020	35.00	--	--	--
	05-25-04	1155	Environmental	125AQUI	1028	80097	35.00	35	32	20.58
	09-22-04	1215	Environmental	125AQUI	1028	80097	35.00	35	32	22.01
KE Bd 176	10-22-03	1300	Core material	125AQUI	1028	80020	46.00	46	44	--
	03-09-04	1620	Environmental	125AQUI	1028	80097	46.00	46	43	20.50
	05-25-04	1440	Environmental	125AQUI	1028	80097	46.00	46	43	20.66
	07-14-04	1125	Environmental	125AQUI	1028	80097	46.00	46	43	21.57
	07-14-04	1126	Replicate	125AQUI	1028	80020	46.00	--	--	--
KE Bd 177	09-22-04	1045	Environmental	125AQUI	1028	80097	46.00	46	43	22.13
	10-08-03	1300	Core material	125AQUI	1028	80020	19.00	21	19	--
	03-17-04	1245	Environmental	125AQUI	1028	80097	19.00	19	16	13.34
	05-17-04	1405	Blank	125AQUI	1028	80020	19.00	--	--	--
	05-17-04	1610	Environmental	125AQUI	1028	80097	19.00	19	16	13.30
KE Bd 178	10-08-03	1300	Core material	125AQUI	1028	80020	36.00	37	35	--
	03-09-04	1130	Environmental	125AQUI	1028	80097	36.00	36	33	22.44
	05-18-04	1100	Environmental	125AQUI	1028	80097	36.00	36	33	13.62
	07-15-04	1155	Environmental	125AQUI	1028	80097	36.00	36	33	13.92
	09-23-04	1245	Environmental	125AQUI	1028	80097	36.00	36	33	14.41
KE Bd 179	09-23-04	1246	Replicate	125AQUI	1028	80097	36.00	--	--	--
	10-08-03	1300	Core material	125HRRS	1028	80020	50.00	50	48	--
	03-09-04	1415	Environmental	125HRRS	1028	80097	50.00	50	47	13.72
	05-18-04	1430	Environmental	125HRRS	1028	80097	50.00	50	47	13.78
	07-14-04	1345	Environmental	125HRRS	1028	80097	50.00	50	47	13.95
KE Be 189	09-23-04	0845	Blank	125HRRS	1028	80097	50.00	--	--	--
	09-23-04	1100	Environmental	125HRRS	1028	80097	50.00	50	47	14.47
	03-12-04	1100	Environmental	125HRRS	1028	80020	53.50	54	50	.27
	05-20-04	1100	Environmental	125HRRS	1028	80097	53.50	54	50	.27
	05-20-04	1101	Replicate	125HRRS	1028	80097	53.50	--	--	--
KE Be 194	03-15-04	1400	Blank	112CLMB	1028	80020	31.00	--	--	--
	03-15-04	1510	Environmental	112CLMB	1028	80097	31.00	31	29	23.23
	05-26-04	1230	Environmental	112CLMB	1028	80097	31.00	31	29	23.37
	05-26-04	1415	Blank	112CLMB	1028	80020	31.00	--	--	--

Geologic Unit (aquifer): 125AQUI - Aquia Formation
 125HRRS - Hornerstown Formation
 112CLMB - Colcumbia Formation

Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80097 - USGS-Carbon Research Lab, Boulder, CO
 80020 - USGS-National Water Quality Lab, Denver, CO

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling depth, feet (00003)	Sampling method, code (82398)	Turbidity white light, det ang 90+/-30 corrcrd NTRU (63676)	UV absorbance, 254 nm, wat flt units /cm (50624)	SUVA, 254 nm, abs units/mgC/L /meter (63162)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	.28	60	33.5	4040	1.0	.007	2.0	769	9.6	92
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	.26	40	43.0	4040	2.0	.006	1.4	767	9.1	95
	09-22-04	.09	70	32.0	4040	--	.008	1.2	772	8.3	87
KE Bd 176	10-22-03	--	--	--	5010	--	--	--	--	--	--
	03-09-04	.66	45	44.5	4040	.3	.007	2.1	767	3.3	31
	05-25-04	.28	60	44.0	4040	2.0	.008	2.2	766	6.2	63
	07-14-04	.21	45	44.5	4040	1.1	.015	3.9	758	6.3	64
	07-14-04	--	--	--	4040	--	--	--	--	--	--
KE Bd 177	09-22-04	.10	110	43.0	4040	--	.008	1.4	772	5.8	60
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	.03	71	15.8	4080	1.0	.009	1.0	765	3.2	27
	05-17-04	--	--	--	--	--	--	--	--	--	--
	05-17-04	.06	85	18.0	4080	3.0	.009	1.6	775	7.6	82
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	.47	60	35.0	4040	.6	.002	.5	767	8.5	80
	05-18-04	.23	45	36.0	4040	<1	.007	1.3	772	9.6	96
	07-15-04	.24	40	34.0	4040	1.8	.008	1.8	756	9.5	95
	09-23-04	.19	77	33.0	4040	--	.007	1.5	772	9.6	96
KE Bd 179	09-23-04	--	--	--	4040	--	.007	2.0	--	--	--
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	.42	60	48.5	4040	11	.009	2.9	767	3.1	29
	05-18-04	.29	51	51.0	4040	1.0	.011	1.7	772	4.6	53
	07-14-04	.31	60	48.5	4040	7.9	.008	2.0	758	4.7	48
KE Be 189	09-23-04	--	--	--	--	--	.001	.4	--	--	--
	09-23-04	.15	110	47.0	4040	--	.008	1.9	772	4.6	45
	03-12-04	.21	80	51.0	4040	20	--	--	764	.1	<1
	05-20-04	.25	150	51.0	4040	1.0	.021	4.1	774	.1	<1
	05-20-04	--	--	--	--	--	.024	5.0	--	--	--
KE Be 194	03-15-04	--	--	--	4040	--	--	--	--	--	--
	03-15-04	.13	60	27.0	4040	5.8	.034	2.7	771	8.3	86
	05-26-04	.20	35	29.0	4040	1.0	.012	1.6	764	9.3	94
	05-26-04	--	--	--	--	--	--	--	--	--	--

Sampling Method: 4040 - Submersible pump
5010 - Sediment core
4080 - Peristaltic pump

QUALITY OF GROUND WATER DATA

KENT COUNTY, MARYLAND—Continued

Well Number	Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Total nitrogen, wat flt by anal ysis, mg/L (62854)	Organic carbon, water, fltrd, mg/L (00681)	Iron (II), water, fltrd, field, mg/L (99114)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	1-Naphthol, water, fltrd, 0.7u GF ug/L (49295)	2,6-Diethyl-aniline water fltrd, 0.7u GF ug/L (82660)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	12.5d	<.008	<.006	13.0d	.4	.020	E4n	3.2	--	--
	03-11-04	12.7d	<.008	<.006	12.6d	--	--	E5n	3.0	--	--
	05-25-04	12.7d	<.008	<.006	11.9d	.4	--	E6n	2.4	<.09	<.006
	09-22-04	11.6d	<.008	<.006	11.8d	.7	--	E5n	2.3	<.09	<.006
KE Bd 176	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	17.5d	<.008	<.006	18.5d	.3	.030	16	14.9	--	--
	05-25-04	18.5d	<.008	<.006	16.7d	.4	--	14	14.7	<.09	<.006
	07-14-04	17.3d	<.008	<.006	13.4d	.4	--	12	14.2	--	--
	07-14-04	17.4d	<.008	<.006	16.7d	--	--	18	14.2	--	--
KE Bd 177	09-22-04	16.9d	<.008	<.006	17.0d	.6	--	31	15.7	--	--
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	8.05d	<.008	<.006	8.23d	1.0	.030	<6	<.8	--	--
	05-17-04	<.06	<.008	<.006	<.03	--	--	<6	<.8	<.09	<.006
	05-17-04	10.6d	<.008	<.006	11.1d	.6	.090	21	22.5	<.09	<.006
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	10.8d	<.008	E.004n	11.2d	.4	.010	E4n	13.3	--	--
	05-18-04	9.46d	<.008	E.004n	9.73d	.5	--	<6	11.4	<.09	<.006
	07-15-04	8.52d	<.008	E.005n	8.91d	.4	--	E5n	10.0	--	--
	09-23-04	10.5d	<.008	E.003n	10.3d	.5	--	<6	10.7	<.09	<.006
KE Bd 179	09-23-04	10.4d	<.008	E.003n	9.97d	.4	--	E4n	10.8	<.09	<.006
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	14.7d	<.008	.006	15.9d	.3	.110	<6	32.2	--	--
	05-18-04	13.2d	<.008	.007	14.2d	.6	--	<6	23.5	<.09	<.006
	07-14-04	14.1d	<.008	E.005n	17.4d	.4	--	<6	22.4	--	--
KE Be 189	09-23-04	<.06	<.008	<.006	<.03	.3	--	<6	<.8	<.09	<.006
	09-23-04	14.1d	<.008	.008	14.5d	.4	--	E5n	21.2	<.09	<.006
	03-12-04	<.06	E.004n	E.004n	<.03	--	2.20	4,040	13.9	--	--
	05-20-04	<.06	<.008	.017	<.03	.5	1.70	3,690	14.1	<.09	<.006
	05-20-04	<.06	.013	E.004n	<.03	.5	--	3,670	14.0	<.09	<.006
KE Be 194	03-15-04	<.06	<.008	<.006	<.03	--	--	<6	<.8	--	--
	03-15-04	5.27d	<.008	.030	5.30d	1.3	.020	36	82.9	--	--
	05-26-04	6.83d	<.008	.016	6.74d	.8	--	7	66.4	<.09	<.006
	05-26-04	--	--	--	--	--	--	--	--	<.09	<.006

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	2-[(2-Ethyl-6methylphenyl)amino]2 oxoESA (62850) ug/L	2Chloro-2,6'-diethylacetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	4Chloro-2methylphenol, water, fltrd, ug/L (61633)	Aceto-chlor ESA, water, fltrd 0.7u GF ug/L (61029)	Aceto-chlor OA, water, fltrd 0.7u GF ug/L (61030)	Aceto-chlor SAA, water, fltrd, ug/L (62847)	Aceto-chlor, water, fltrd, ug/L (49260)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	--	<.005	E1.03	<.004	<.004	<.006	--	--	--	<.006
	09-22-04	--	<.005	E.756	<.004	<.004	<.006	--	--	--	<.006
KE Bd 176	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	--	<.005	E.004n	<.004	<.004	<.006	--	--	--	<.006
	07-14-04	--	--	--	--	--	--	--	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Bd 177	09-22-04	--	--	--	--	--	--	--	--	--	--
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	--	--	--	--	--	--	--	--	--	--
	05-17-04	<.02	<.005	<.006	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	05-17-04	<.02	<.035	E.237	<.004	<.004	<.006	<.02	<.02	<.02	<.006
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	.02	<.005	E.356	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-23-04	<.02	<.005	E.292	<.004	<.004	<.006	<.02	<.02	<.02	<.006
KE Bd 179	09-23-04	.02	<.005	E.414	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	1.02	<.005	E.037	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Be 189	09-23-04	<.02	<.005	<.006	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	09-23-04	.35	<.005	E.038	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	03-12-04	--	--	--	--	--	--	--	--	--	--
	05-20-04	<.02	<.005	<.006	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	05-20-04	<.02	<.005	<.006	<.004	<.004	<.006	<.02	<.02	<.02	<.006
KE Be 194	03-15-04	--	--	--	--	--	--	--	--	--	--
	03-15-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	--	<.005	E.104	<.004	<.004	<.006	--	--	--	<.006
	05-26-04	--	<.005	<.006	<.004	<.004	<.006	--	--	--	<.006

QUALITY OF GROUND WATER DATA

KENT COUNTY, MARYLAND—Continued

Well Number	Date	Ala-chlor ESA SA, water, fltrd, ug/L (62849)	Ala-chlor ESA, water, fltrd 0.7u GF ug/L (50009)	Ala-chlor OA, water, fltrd 0.7u GF ug/L (61031)	Ala-chlor SAA, water, fltrd, ug/L (62848)	Ala-chlor, water, fltrd, ug/L (46342)	alpha- HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atra- zine, wat flt immuno- assay unadj. ug/L (99775)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl oxon, water, fltrd, ug/L (61635)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	.20	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	--	--	--	--	<.005	67.9	--	<.007	<.03c	<.050
	09-22-04	--	--	--	--	<.005	71.0	--	<.007	<.07	<.050
KE Bd 176	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	--	--	--	--	<.005	77.7	--	<.007	<.02	<.050
	07-14-04	--	--	--	--	--	--	--	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Bd 177	09-22-04	--	--	--	--	--	--	--	--	--	--
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	--	--	--	--	--	--	.13	--	--	--
	05-17-04	<.02	<.02	<.02	<.02	<.005	90.3	--	<.007	<.12	<.050
	05-17-04	<.02	<.02	<.02	<.02	<.005	88.9	--	.029	<.12	<.050
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	.23	--	--	--
	05-18-04	<.02	<.02	<.02	<.02	<.005	75.2	--	E.003t	<.09	<.050
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-23-04	<.02	.03	<.02	<.02	<.005	77.4	--	E.003t	<.07	<.050
KE Bd 179	09-23-04	<.02	.03	<.02	<.02	<.005	94.3	--	E.006n	<.07	<.050
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	.11	--	--	--
	05-18-04	<.02	.18	<.02	<.02	<.005	74.2	--	<.007	<.02	<.050
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Be 189	09-23-04	<.02	<.02	<.02	<.02	<.005	93.3	--	<.007	<.07	<.050
	09-23-04	<.02	.42	.03	<.02	<.005	77.1	--	<.007	<.07	<.050
	03-12-04	--	--	--	--	--	--	.03	--	--	--
	05-20-04	<.02	<.02	<.02	<.02	<.005	77.0	--	<.007	<.03c	<.050
	05-20-04	<.02	<.02	<.02	<.02	<.005	77.0	--	<.007	<.03c	<.050
KE Be 194	03-15-04	--	--	--	--	--	--	--	--	--	--
	03-15-04	--	--	--	--	--	--	1.15	--	--	--
	05-26-04	--	--	--	--	<.005	75.7	--	1.09	<.02	<.050
	05-26-04	--	--	--	--	<.005	88.0	--	<.007	<.02	<.050

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Ben-flur- alin, water, fltrd 0.7u GF (82673)	Car- baryl, water, fltrd 0.7u GF (82680)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF (82687)	Cyflu- thrin, water, fltrd, ug/L (61585)	Cyper- methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF (82682)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diaz- inon oxon, water, fltrd, ug/L (61638)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	09-22-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
KE Bd 176	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-14-04	--	--	--	--	--	--	--	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Bd 177	09-22-04	--	--	--	--	--	--	--	--	--	--
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	--	--	--	--	--	--	--	--	--	--
	05-17-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	05-17-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-23-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
KE Bd 179	09-23-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Be 189	09-23-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	09-23-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	03-12-04	--	--	--	--	--	--	--	--	--	--
	05-20-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	05-20-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
KE Be 194	03-15-04	--	--	--	--	--	--	--	--	--	--
	03-15-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	05-26-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water, fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.005	56.5	<.08	<.009	--	--	--	<.006	<.03	<.004
	09-22-04	<.005	76.1	<.08	<.009	--	--	--	<.006	<.0020	<.004
KE Bd 176	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.005	92.8	<.08	<.009	--	--	--	<.006	<.03	<.004
	07-14-04	--	--	--	--	--	--	--	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Bd 177	09-22-04	--	--	--	--	--	--	--	--	--	--
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	--	--	--	--	--	--	--	--	--	--
	05-17-04	<.005	96.1	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004
	05-17-04	<.005	94.6	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.005	61.8	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-23-04	<.005	80.5	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004
KE Bd 179	09-23-04	<.005	87.4	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.005	63.1	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Be 189	09-23-04	<.005	83.1	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004
	09-23-04	<.005	81.8	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004
	03-12-04	--	--	--	--	--	--	--	--	--	--
	05-20-04	<.005	62.8	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004
	05-20-04	<.005	62.8	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004
KE Be 194	03-15-04	--	--	--	--	--	--	--	--	--	--
	03-15-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.005	61.7	<.08	<.009	--	--	--	<.006	<.03	<.004
	05-26-04	<.005	86.3	<.08	<.009	--	--	--	<.006	<.03	<.004

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenami-phos sulf-oxide, water, fltrd, ug/L (61646)	Fenami-phos, water, fltrd, ug/L (61591)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flufen-acet ESA, water, fltrd, ug/L (61952)	Flufe-nacet OA, water, fltrd, ug/L (62483)	Flufe-nacet, water, fltrd, ug/L (62481)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.030c	--u	<.03	<.029	<.013	<.024	<.016	--	--	--
	09-22-04	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	--
KE Bd 176	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Bd 177	09-22-04	--	--	--	--	--	--	--	--	--	--
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	--	--	--	--	--	--	--	--	--	--
	05-17-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
	05-17-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-23-04	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
KE Bd 179	09-23-04	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Be 189	09-23-04	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
	09-23-04	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
	03-12-04	--	--	--	--	--	--	--	--	--	--
	05-20-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
	05-20-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
KE Be 194	03-15-04	--	--	--	--	--	--	--	--	--	--
	03-15-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.008	--u	<.03	<.029	<.013	<.024	<.016	--	--	--
	05-26-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	--

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa-zinone, water, fltrd, ug/L (04025)	Ipro-dione, water, fltrd, ug/L (61593)	Isofen-phos, water, fltrd, ug/L (61594)	Mala-oxon, water, fltrd, ug/L (61652)	Mala-thion, water, fltrd, ug/L (39532)	Meta-laxyl, water, fltrd, ug/L (61596)	Methi-althion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd, ug/L (61664)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	09-22-04	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03
KE Bd 176	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	07-14-04	--	--	--	--	--	--	--	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Bd 177	09-22-04	--	--	--	--	--	--	--	--	--	--
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	--	--	--	--	--	--	--	--	--	--
	05-17-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	05-17-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-23-04	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03
KE Bd 179	09-23-04	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Be 189	09-23-04	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03
	09-23-04	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03
	03-12-04	--	--	--	--	--	--	--	--	--	--
	05-20-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	05-20-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
KE Be 194	03-15-04	--	--	--	--	--	--	--	--	--	--
	03-15-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	05-26-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Methyl para- thion, water, fltrd 0.7u GF (82667)	Metola- chlor ESA, water, fltrd 0.7u GF (61043)	Metola- chlor OA, water, fltrd 0.7u GF (61044)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Myclo- butanil water, fltrd, ug/L (61599)	Pendi- meth- alin, water, fltrd 0.7u GF (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF (82664)	Phosmet oxon, water, fltrd, ug/L (61668)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.015	--	--	.036	<.006	<.008	<.022	<.10	<.011	--u
09-22-04	<.015	--	--	.035	<.006	<.008	<.022	<.10	<.011	<.05	
KE Bd 176	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.015	--	--	<.013	<.006	<.008	<.022	<.10	<.011	--u
	07-14-04	--	--	--	--	--	--	--	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
09-22-04	--	--	--	--	--	--	--	--	--	--	
KE Bd 177	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	--	--	--	--	--	--	--	--	--	--
	05-17-04	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
	05-17-04	<.015	2.00	.58	<.013	E.012	<.008	<.022	<.10	<.011	<.06
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.015	3.86	.80	E.003t	<.006	<.008	<.022	<.10	<.011	<.06
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-23-04	<.015	5.24	.99	<.013	<.006	<.008	<.022	<.10	<.011	<.05
09-23-04	<.015	4.62	.89	E.004t	<.006	<.008	<.022	<.10	<.011	<.05	
KE Bd 179	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.015	12.0	.06	E.002t	<.006	<.008	<.022	<.10	<.011	<.06
	07-14-04	--	--	--	--	--	--	--	--	--	--
09-23-04	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.05	
KE Be 189	09-23-04	<.015	15.1	.04	<.013	<.006	<.008	<.022	<.10	<.011	<.05
	03-12-04	--	--	--	--	--	--	--	--	--	--
	05-20-04	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
	05-20-04	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
KE Be 194	03-15-04	--	--	--	--	--	--	--	--	--	--
	03-15-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.015	--	--	E.011n	<.006	<.008	<.022	<.10	<.011	<.06
	05-26-04	<.015	--	--	<.013	<.006	<.008	<.022	<.10	<.011	--u

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propa- chlor OA, water, fltrd 0.7u GF ug/L (62767)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)
KE Bd 175	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07	<.02
	09-22-04	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07	<.02
KE Bd 176	10-22-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-25-04	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07	<.02
	07-14-04	--	--	--	--	--	--	--	--	--	--
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Bd 177	09-22-04	--	--	--	--	--	--	--	--	--	--
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-17-04	--	--	--	--	--	--	--	--	--	--
	05-17-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
	05-17-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
KE Bd 178	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
	07-15-04	--	--	--	--	--	--	--	--	--	--
	09-23-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
KE Bd 179	09-23-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
	10-08-03	--	--	--	--	--	--	--	--	--	--
	03-09-04	--	--	--	--	--	--	--	--	--	--
	05-18-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
	07-14-04	--	--	--	--	--	--	--	--	--	--
KE Be 189	09-23-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
	09-23-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
	03-12-04	--	--	--	--	--	--	--	--	--	--
	05-20-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
	05-20-04	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
KE Be 194	03-15-04	--	--	--	--	--	--	--	--	--	--
	03-15-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.008	<.01	<.005	<.004	--	--	.011	<.02	<.07	<.02
	05-26-04	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07	<.02

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

WellNumber	Date	Di- chlor- vos, water fltrd, ug/L (38775)	Sampler type, code (84164)
KE Bd 175	10-22-03	--	--
	03-11-04	--	4040
	<i>03-11-04</i>	--	--
	05-25-04	<.01	4040
	09-22-04	<.01	4045
KE Bd 176	10-22-03	--	5020
	03-09-04	--	4040
	05-25-04	<.01	4040
	07-14-04	--	4040
	<i>07-14-04</i>	--	<i>4040</i>
KE Bd 177	09-22-04	--	4045
	10-08-03	--	8010
	03-17-04	--	4080
	<i>05-17-04</i>	<.01	--
	05-17-04	<.01	4080
KE Bd 178	10-08-03	--	8010
	03-09-04	--	4040
	05-18-04	<.01	4040
	07-15-04	--	4040
	09-23-04	<.01	4040
KE Bd 179	<i>09-23-04</i>	<.01	<i>4045</i>
	10-08-03	--	8010
	03-09-04	--	4040
	05-18-04	<.01	4040
	07-14-04	--	4040
KE Be 189	<i>09-23-04</i>	<.01	--
	09-23-04	<.01	4040
	03-12-04	--	4040
	05-20-04	<.01	4040
	<i>05-20-04</i>	<.01	--
KE Be 194	<i>03-15-04</i>	--	<i>4040</i>
	03-15-04	--	4040
	05-26-04	<.01	4040
	<i>05-26-04</i>	<.01	--

Sampling Type: 4040 - Submersible pump
 4045 - Submersible multiple impeller (turbine) pump
 5020 - Boxcore, short
 8010 - Other
 4080 - Peristaltic pump

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	Time	Sample type	Geologic unit	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
KE Be 194	05-26-04	1416	Blank	112CLMB	1028	1028	31.0	--	--	--
	07-13-04	0930	Blank	112CLMB	1028	80020	31.0	--	--	--
KE Be 195	07-13-04	1040	Environmental	112CLMB	1028	80097	31.0	31	29	24.07
	09-27-04	1300	Environmental	112CLMB	1028	80020	31.0	31	29	24.99
	03-15-04	1650	Environmental	125AQUI	1028	80097	59.8	60	57	23.24
KE Be 207	05-20-04	1430	Environmental	125AQUI	1028	80020	59.8	60	57	23.47
	05-24-04	1320	Environmental	125AQUI	1028	80097	43.5	42	43	8.78
KE Be 218	07-13-04	1310	Environmental	125AQUI	1028	80097	43.5	42	43	9.45
	09-30-04	1145	Environmental	125AQUI	1028	80097	43.5	42	43	10.19
	10-16-03	1300	Core material	125AQUI	1028	80020	14.5	14	12	--
KE Be 219	03-11-04	1425	Environmental	125AQUI	1028	80097	14.5	14	12	2.10
	05-26-04	0905	Environmental	125AQUI	1028	80097	14.5	14	12	2.25
	07-12-04	1500	Environmental	125AQUI	1028	80097	14.5	14	12	2.66
	09-21-04	1315	Environmental	125AQUI	1028	80097	14.5	14	12	2.72
	10-16-03	1300	Core material	125AQUI	1028	80020	33.0	30	28	--
	03-11-04	1545	Environmental	125AQUI	1028	80097	33.0	33	30	1.95
	05-26-04	1040	Environmental	125AQUI	1028	80097	33.0	33	30	2.17
	09-21-04	1145	Environmental	125AQUI	1028	80097	33.0	33	30	2.54

	Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling depth, feet (00003)	Sampling method, code (82398)	Turbidity white light, det ang 90+/-30 corrcrtd NTRU (63676)	UV absorbance, 254 nm, wat flt units /cm (50624)	SUVA, 254 nm, abs units/mgC/L /meter (63162)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 195	07-13-04	.11	60	30.0	4040	6.2	.010	1.0	765	8.6	87
	09-27-04	.10	50	28.0	4040	2.0	--	--	768	9.4	98
	03-15-04	.15	55	41.0	4040	3.3	.036	3.2	771	8.0	79
KE Be 207	05-20-04	.25	90	58.0	4040	6.0	--	--	773	8.0	78
	05-24-04	.12	60	41.0	4040	3.0	.008	2.1	765	8.8	96
KE Be 218	07-13-04	.13	60	42.7	4040	.6	.001	.4	766	8.4	88
	09-30-04	.16	95	40.5	4040	1.0	.010	1.5	--	9.8	--
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	.32	35	13.0	4040	2.0	.018	1.7	769	3.4	31
	05-26-04	.26	35	12.5	4040	1.0	.018	1.6	763	4.0	39
	07-12-04	.10	50	13.0	4040	1.9	.006	.7	766	5.1	53
	09-21-04	.18	95	11.5	4040	1.0	.019	1.6	773	3.3	35
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	.50	40	31.5	4040	2.0	.005	1.5	769	9.5	91
	05-26-04	.28	45	31.0	4040	1.0	.007	1.5	765	9.1	90
	09-21-04	.17	68	30.0	4040	.0	.005	.8	773	9.1	91

Geologic Unit (aquifer): 112CLMB - Columbia Formation
 125AQUI - Aquia Formation

Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80097 - USGS-Carbon Research Lab, Boulder, CO
 80020 - USGS-National Water Quality Lab, Denver, CO

Sampling Method: 4040 - Submersible pump

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	.01	<.008	<.16	<.10	--
	07-13-04	5.1	1,240	24.0	16.0	370	60.4	52.1	6.34	61.6	7
KE Be 195	09-27-04	5.2	1,400	27.0	17.5	380	60.5	55.8	6.43	86.4	14
	03-15-04	5.3	1,160	15.5	15.0	390	107	30.5	6.37	41.9	16
KE Be 207	05-20-04	5.0	1,070	24.0	15.0	390	104	30.5	6.88	28.6	8
	05-24-04	5.2	141	33.0	20.0	27	7.80	1.93	1.41	13.8	6
	07-13-04	5.0	143	24.0	18.0	30	8.53	2.10	1.50	11.2	6
KE Be 218	09-30-04	5.0	200	25.0	16.0	72	11.0	10.7	1.26	4.98	--
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	5.4	251	10.5	11.5	110	27.3	9.83	1.74	1.99	18
	05-26-04	5.2	236	25.0	14.0	98	25.3	8.57	1.88	1.64	14
	07-12-04	4.8	224	29.0	17.5	88	21.7	8.12	2.07	1.45	--
	09-21-04	5.5	217	28.0	19.7	91	24.0	7.67	2.24	2.76	20
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	5.0	102	10.0	14.0	35	8.71c	3.16c	1.96c	1.45c	6
	05-26-04	4.8	92	27.5	15.0	30	7.46c	2.69c	1.84c	1.42c	3
09-21-04	4.8	96	27.0	15.7	35	9.17	2.97	2.22	1.75	5	

Well Number	Date	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, field, mg/L (99113)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, field, mg/L as N (99121)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	<.02	<.20	<.2	.04	--	<.2	<.10	<.04	--
	07-13-04	9	.09	348d	<.2	12.1	--	.4	707	<.04	--
KE Be 195	09-27-04	16	.11	405d	<.2	12.2	--	.5	814	<.04	--
	03-15-04	20	.06	336d	<.2	15.3	3.00	1.9	689	<.04	3.6
KE Be 207	05-20-04	9	.07	294	<.2	15.8	--	.5	805	<.04	--
	05-24-04	8	.05	14.4	<.2	19.8	--	.2	119	<.04	--
	07-13-04	8	.04	14.2	<.2	19.4	--	.2	113	<.04	--
KE Be 218	09-30-04	--	.02	15.9	<.2	18.3	--	2.6	142	<.04	--
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	22	E.02n	7.51	<.2	3.72	30.0	38.5	154	<.04	12
	05-26-04	18	.02	7.14	<.2	4.26	--	39.0	155	<.04	--
	07-12-04	--	.02	7.13	<.2	5.09	--	38.4	133	<.04	--
	09-21-04	<24	.02	5.24	<.2	5.04	--	34.8	135d	<.04	--
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	7	<.02	10.3	<.2	11.5c	1.00	1.6	71	<.04	5.7
	05-26-04	4	E.01n	10.2	<.2	11.3c	--	1.1	84	<.04	--
09-21-04	7	<.02	10.6	<.2	12.9	--	.6	86d	<.04	--	

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Total nitrogen, wat flt by anal ysis, mg/L (62854)	Organic carbon, water, fltrd, mg/L (00681)	Iron (II), water, fltrd, field, mg/L (99114)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	1-Naphthol, water, fltrd, 0.7u GF ug/L (49295)	2,6-Diethyl-aniline water fltrd, 0.7u GF ug/L (82660)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	<.06	<.008	<.006	<.03	--	--	<.6	<.8	--	--
	07-13-04	6.01d	<.008	.013	5.81d	.9	--	33	66.2	--	--
KE Be 195	09-27-04	5.92d	<.008	.017	5.77d	--	--	32	62.9	<.09	<.006
	03-15-04	3.69	<.008	.017	3.80	1.1	.050	16	46.9	--	--
KE Be 207	05-20-04	4.97	<.008	.007	4.83	--	--	17	46.2	<.09	<.006
	05-24-04	8.80d	<.008	.136	8.62d	.4	--	E4n	5.5	<.09	<.006
	07-13-04	8.73d	<.008	.100	8.33d	.3	--	<.6	6.3	--	--
KE Be 218	09-30-04	14.3d	<.008	.008	13.8d	.7	--	13	10.9	<.09	<.006
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	12.9d	<.008	<.006	12.7d	1.1	.030	E4n	18.5	--	--
	05-26-04	10.9d	<.008	<.006	10.8d	1.2	--	E4n	20.3	<.09	<.006
	07-12-04	10.3d	<.008	<.006	10.2d	.9	--	<.6	21.7	--	--
	09-21-04	8.35d	<.008	<.006	8.57d	1.2	--	E4n	13.9	<.09	<.006
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	5.47d	<.008	E.005n	5.64d	.4	.030	<.6c	8.5c	--	--
05-26-04	4.62	<.008	E.004n	4.72	.5	--	E3nc	7.0c	<.09	<.006	
09-21-04	4.70	<.008	E.005n	4.77	.6	--	E4n	7.4	<.09	<.006	
	Date	2-[(2-Ethyl-6methyl phenyl) amino]2 oxoESA ug/L (62850)	2Chloro -2,6'-diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto-chlor ESA, water, fltrd, 0.7u GF ug/L (61029)	Aceto-chlor OA, water, fltrd, 0.7u GF (61030)	Aceto-chlor SAA, water, fltrd, ug/L (62847)	Aceto-chlor, water, fltrd, ug/L (49260)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 195	09-27-04	.04	<.005	E.089	<.004	<.004	<.006	.07	<.02	<.02	<.006
	03-15-04	--	--	--	--	--	--	--	--	--	--
KE Be 207	05-20-04	<.02	<.005	E.020	<.004	<.004	<.006	<.02	<.02	<.02	<.006
	05-24-04	<.02	<.005	E.006n	<.004	<.004	<.006	<.02	<.02	<.02	E.006n
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 218	09-30-04	<.02	<.005	E.199	<.004	<.004	<.006	.82	<.02	<.02	<.006
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	--	<.005	E.426	<.004	<.004	<.006	--	--	--	<.006
	07-12-04	--	--	--	--	--	--	--	--	--	--
	09-21-04	--	<.005	E.334	<.004	<.004	<.006	--	--	--	<.006
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
05-26-04	--	<.005	E.092	<.004	<.004	<.006	--	--	--	<.006	
09-21-04	--	<.005	E.148	<.004	<.004	<.006	--	--	--	<.006	

QUALITY OF GROUND WATER DATA

KENT COUNTY, MARYLAND—Continued

Well Number	Date	Ala-chlor	Ala-chlor	Ala-chlor	Ala-chlor	Ala-chlor	alpha-HCH-d6,	Atra-zine,	Atra-zine,	Azin-phos-	Azin-phos-
		ESA SA, water, fltrd, ug/L (62849)	ESA, water, fltrd, 0.7u GF ug/L (50009)	OA, water, fltrd, 0.7u GF ug/L (61031)	SAA, water, fltrd, ug/L (62848)	chlor, water, fltrd, ug/L (46342)	surrog, Sch2003 wat flt percent recovry (99995)	wat flt immuno-assay unadj. ug/L (99775)	wat flt immuno-assay unadj. ug/L (39632)	methyloxon, water, fltrd, ug/L (61635)	methyloxon, water, fltrd, 0.7u GF ug/L (82686)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
	09-27-04	<.02	.10	<.02	<.02	<.005	76.2	--	.736	<.07	<.050
KE Be 195	03-15-04	--	--	--	--	--	--	.04	--	--	--
	05-20-04	<.02	<.02	<.02	<.02	<.005	81.9	--	.017	<.02	<.050
KE Be 207	05-24-04	<.02	.21	<.02	<.02	<.005	83.8	--	E.005n	<.02	<.050
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 218	09-30-04	<.02	.54	<.02	<.02	<.005	79.4	--	.416	<.07	<.050
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	--	--	--	--	--	--	.13	--	--	--
	05-26-04	--	--	--	--	<.005	71.0	--	.756	<.02	<.050
	07-12-04	--	--	--	--	--	--	--	--	--	--
	09-21-04	--	--	--	--	<.005	74.5	--	.543	<.11	<.050
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	.25	--	--	--
	05-26-04	--	--	--	--	<.005	65.7	--	<.007	<.02	<.050
	09-21-04	--	--	--	--	<.005	76.9	--	<.007	<.07	<.050
Well Number	Date	Ben-flur-	Car-baryl,	Chlor-pyri-	Chlor-pyri-	cis-Per-	Cyflu-	Cyper-	DCPA,	Desulf-	Diaz-
		alin, water, fltrd, 0.7u GF ug/L (82673)	water, fltrd, 0.7u GF ug/L (82680)	fosoxon, water, fltrd, ug/L (61636)	fosoxon, water, fltrd, ug/L (38933)	methrin water fltrd, 0.7u GF ug/L (82687)	thrin, water, fltrd, ug/L (61585)	methrin water, fltrd, ug/L (61586)	water fltrd, 0.7u GF (82682)	inyl fipronil, water, fltrd, ug/L (62170)	inon oxon, water, fltrd, ug/L (61638)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
	09-27-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
KE Be 195	03-15-04	--	--	--	--	--	--	--	--	--	--
	05-20-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
KE Be 207	05-24-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 218	09-30-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	07-12-04	--	--	--	--	--	--	--	--	--	--
	09-21-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01
	10-16-03	--	--	--	--	--	--	--	--	--	--
	09-21-04	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01

QUALITY OF GROUND WATER DATA
KENT COUNTY, MARYLAND—Continued

Well Number	Date	Diazi-	Diazi-	Dicro-	Diel-	Dimeth-	Dimeth-	Dimeth-	Dimeth-	Ethion	Ethion,
		non, water, fltrd, ug/L (39572)	non-d10 surrog, Sch2003 wat flt percent recovry (99994)	tophos, water fltrd, ug/L (38454)	drin, water, fltrd, ug/L (39381)	enamid ESA, water, fltrd, ug/L (61951)	enamid OA, water, fltrd, ug/L (62482)	enamid water, fltrd, ug/L (61588)	oate, water, fltrd 0.7u GF ug/L (82662)	monoxon water, fltrd, ug/L (61644)	water, fltrd, ug/L (82346)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
	09-27-04	<.005	87.9	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004
KE Be 195	03-15-04	--	--	--	--	--	--	--	--	--	--
	05-20-04	<.005	86.3	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004
KE Be 207	05-24-04	<.005	80.1	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 218	09-30-04	<.005	88.7	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.005	61.8	<.08	<.009	--	--	--	<.006	<.03	<.004
	07-12-04	--	--	--	--	--	--	--	--	--	--
	09-21-04	<.005	69.3	<.08	<.009	--	--	--	<.006	<.0020	<.004
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Be 219	05-26-04	<.005	54.3	<.08	<.009	--	--	--	<.006	<.03	<.004
	09-21-04	<.005	73.7	<.08	<.009	--	--	--	<.006	<.0020	<.004

Well Number	Date	Fenami-	Fenami-	Desulf-	Fipro-	Fipro-	Fipro-	Flufen-	Flufe-	Flufe-	
		phos sulfone water, fltrd, ug/L (61645)	phos sulf- oxide, water, fltrd, ug/L (61646)	phos- phos, water, fltrd, ug/L (61591)	inyl- fipro- nil amide, wat flt ug/L (62169)	pro- nil sulfide water, fltrd, ug/L (62167)	pro- nil sulfone water, fltrd, ug/L (62168)	pro- nil, water, fltrd, ug/L (62166)	acet ESA, water, fltrd, ug/L (61952)	acet OA, water, fltrd, ug/L (62483)	acet, water, fltrd, ug/L (62481)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	
	07-13-04	--	--	--	--	--	--	--	--	--	
	07-13-04	--	--	--	--	--	--	--	--	--	
	09-27-04	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
KE Be 195	03-15-04	--	--	--	--	--	--	--	--	--	
	05-20-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
KE Be 207	05-24-04	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 218	09-30-04	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.008	--u	<.03	<.029	<.013	<.024	<.016	--	--	--
	07-12-04	--	--	--	--	--	--	--	--	--	--
	09-21-04	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	--
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
KE Be 219	05-26-04	<.008	--u	<.03	<.029	<.013	<.024	<.016	--	--	--
	09-21-04	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	--

QUALITY OF GROUND WATER DATA

KENT COUNTY, MARYLAND—Continued

Well Number	Date	Fonofos	Fonofos	Hexa-	Ipro-	Isofen-	Mala-	Mala-	Meta-	Methi-	Methyl
		oxon, water, fltrd, ug/L (61649)	oxon, water, fltrd, ug/L (04095)	zinone, water, fltrd, ug/L (04025)	dione, water, fltrd, ug/L (61593)	phos, water, fltrd, ug/L (61594)	oxon, water, fltrd, ug/L (61652)	thion, water, fltrd, ug/L (39532)	laxyl, water, fltrd, ug/L (61596)	alithion water, fltrd, ug/L (61598)	para- oxon, water, fltrd, ug/L (61664)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 195	09-27-04	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03
	03-15-04	--	--	--	--	--	--	--	--	--	--
KE Be 207	05-20-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	05-24-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 218	09-30-04	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	07-12-04	--	--	--	--	--	--	--	--	--	--
	09-21-04	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03
	09-21-04	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03
Well Number	Date	Methyl	Metola-	Metola-	Metola-	Metri-	Myclo-	Pendi-	Phorate	Phorate	Phosmet
		para- thion, water, fltrd, 0.7u GF ug/L (82667)	chlor ESA, water, fltrd, 0.7u GF ug/L (61043)	chlor OA, water, fltrd, 0.7u GF ug/L (61044)	chlor, water, fltrd, ug/L (39415)	buzin, water, fltrd, ug/L (82630)	butanil water, fltrd, ug/L (61599)	meth- alin, water, fltrd, 0.7u GF ug/L (82683)	oxon, water, fltrd, ug/L (61666)	water fltrd 0.7u GF ug/L (82664)	oxon, water, fltrd, ug/L (61668)
KE Be 194	05-26-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 195	09-27-04	<.015	1.78	.28	E.011n	<.006	<.008	<.022	<.10	<.011	<.05
	03-15-04	--	--	--	--	--	--	--	--	--	--
KE Be 207	05-20-04	<.015	.87	<.02	.034	<.006	<.008	<.022	<.10	<.011	<.06
	05-24-04	<.015	.24	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
	07-13-04	--	--	--	--	--	--	--	--	--	--
KE Be 218	09-30-04	<.015	11.3	.68	E.008n	<.010	<.008	<.022	<.10	<.011	<.05
	10-16-03	--	--	--	--	--	--	--	--	--	--
KE Be 219	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.015	--	--	<.013	<.006	<.008	<.022	<.10	<.011	<.06
	07-12-04	--	--	--	--	--	--	--	--	--	--
	09-21-04	<.015	--	--	E.006n	<.006	<.008	<.022	<.10	<.011	<.05
	10-16-03	--	--	--	--	--	--	--	--	--	--
	03-11-04	--	--	--	--	--	--	--	--	--	--
	05-26-04	<.015	--	--	.104	<.006	<.008	<.022	<.10	<.011	<.06
	09-21-04	<.015	--	--	.090	<.007	<.008	<.022	<.10	<.011	<.05

QUALITY OF GROUND WATER DATA
 KENT COUNTY, MARYLAND—Continued

Well Number	Date	Di-chlor- vos, water fltrd, ug/L (38775)	Sampler type, code (84164)
KE Be 194	05-26-04	--	--
	07-13-04	--	--
	07-13-04	--	4040
KE Be 195	09-27-04	<.01	4040
	03-15-04	--	4040
KE Be 207	05-20-04	<.01	4040
	05-24-04	<.01	4040
	07-13-04	--	4040
	09-30-04	<.01	4040
KE Be 218	10-16-03	--	--
	03-11-04	--	4040
KE Be 219	05-26-04	<.01	4040
	07-12-04	--	4040
	09-21-04	<.01	4040
	10-16-03	--	--
	03-11-04	--	4040
	05-26-04	<.01	4040
	09-21-04	<.01	4040

Remark codes used in this table:

< -- Less than
 E -- Estimated value
 M-- Presence verified, not quantified

Value qualifier codes used in this table:

d -- Diluted sample: method hi range exceeded
 m-- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the LT-MDL

Null value qualifier codes used in this table:

u -- Unable to determine-matrix interference

Sampling type: 4040 - Submersible pump

LRL - Laboratory Reporting Level

LT-MDL - Long-Term Method Detection Limit

MONTGOMERY COUNTY, MARYLAND

Well Number	Date	Time	Station number	Sample type	Station type	Altitude of land surface feet (72000)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)		
POTOMAC RIVER NEAR GREAT FALLS	08-05-04	1000	385620077064201	Finished water	SS	150	8030	755	4.7		
	09-09-04	1030		Finished water	SS	150	8030	754	9.2		
	Date	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF (38746)	2,6-Di-ethyl-aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)
	08-05-04	61	7.6	354	28.4	109	<.009	.11	<.02m	<.006	E.049
	09-09-04	113	7.4	448	25.0	99.7	<.009	<.02	<.02m	<.006	E.061
	Date	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy-carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor ESA, water, fltrd 0.7u GF ug/L (61029)	Aceto-chlor OA, water, fltrd 0.7u GF ug/L (61030)	Aceto-chlor, water, fltrd, ug/L (49260)	Aci-fluor-fen, water, fltrd, ug/L (49315)	Ala-chlor ESA, water, fltrd, ug/L (50009)	Ala-chlor OA, water, fltrd, ug/L (61031)
	08-05-04	E.02m	E.081m	<.006	<.01m	<.02	<.02	<.006	<.007	<.02	<.02
	09-09-04	E.01mnc	E.036m	<.006	<.01m	<.02	<.02	<.006	<.007	.03	<.02
	Date	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	Bendi-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)
	08-05-04	<.005	<.02m	<.008m	<.04m	.103	<.050	83.8	<.03	<.010	<.004
	09-09-04	<.005	<.02m	<.008m	<.04m	.061	<.050	78.7	<.03	<.010	<.004
	Date	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)	Caf-feine, water, fltrd, ug/L (50305)	Caf-feine-13C, surrog, wat flt percent recovry (99959)	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)
	08-05-04	<.02	<.01m	<.03m	<.02m	<.017	E88.6	<.03	<.041	<.006	<.02m
	09-09-04	<.02	<.01m	<.03m	<.02m	.014	91.2	<.03	<.041	<.006	<.02m

Station Type: SS - Specific source

Sampling Method: 8030 - Grab sample at water-supply tap

QUALITY OF GROUND WATER DATA
MONTGOMERY COUNTY, MARYLAND—Continued

Well Number	Date	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-triazine, wat flt ug/L (04039)	Chloro-thaloni, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cycloate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)
POTOMAC RIVER NEAR GREAT FALLS	08-05-04	<.010	E.02mtc	<.04m	<.005	<.006	<.10	<.01m	<.01	<.003	<.005
	09-09-04	<.010	E.04mnc	<.04m	<.005	<.006	<.01	<.01m	<.01	<.003	<.005
	Date	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dimeth-enamid ESA, water, fltrd, ug/L (61951)	Dimeth-enamid OA, water, fltrd, ug/L (62482)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flufen-acet ESA, water, fltrd, ug/L (61952)
	08-05-04	<.01	<.01	<.009	<.02	<.02	<.01	<.03	.02	<.03	<.02
	09-09-04	<.01	<.01	<.009	<.02	<.02	<.01	<.03	<.01	<.03	<.02
	Date	Flufe-nacet OA, water, fltrd, ug/L (62483)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Hexa-zinone, water, fltrd, ug/L (04025)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Linuron water, fltrd 0.7u GF ug/L (38478)	Malathion, water, fltrd, ug/L (39532)
	08-05-04	<.02	<.01m	<.03	<.003	<.013	<.02m	<.02m	<.007	<.01	<.027
	09-09-04	<.02	<.01m	<.03	<.003	<.013	<.02m	<.02m	<.007	<.01	<.027
	Date	mPA, water, fltrd 0.7u GF ug/L (38482)	mPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metola-chlor OA, water, fltrd 0.7u GF ug/L (61044)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)
	08-05-04	<.02	<.01m	E.01t	<.008m	<.004m	<.015	.28	.10	.065	<.006
	09-09-04	<.02	<.01m	<.02	<.008m	<.004m	<.015	.21	.04	.014	<.006
	Date	Metsul-furon, water, fltrd, ug/L (61697)	N-(4-Chloro-phenyl)-N'-methyl-urea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Pic-loram, water, fltrd, ug/L (49291)
	08-05-04	<.03m	<.02	<.01	<.01	<.02m	<.02	<.01	<.022	<.011	<.02
	09-09-04	<.03m	<.02	<.01	<.01	<.02m	<.02	<.01	<.022	<.011	<.02

QUALITY OF GROUND WATER DATA

MONTGOMERY COUNTY, MARYLAND—Continued

Well Number	Date	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd, 0.7u GF ug/L (82676)	Propham, water, fltrd, 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd, 0.7u GF ug/L (38538)	Siduron, water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometuron, water, fltrd, ug/L (50337)	Tebu-thiuron, water, fltrd, 0.7u GF ug/L (82670)
POTOMAC RIVER NEAR GREAT FALLS	08-05-04	<.01	<.005	<.004	<.010	<.02	<.008	<.02	.034	<.009	<.02
	09-09-04	.02	<.005	<.004	<.010	<.02	<.008	<.02	.019	<.009	<.02
	Date	Terbacil, water, fltrd, ug/L (04032)	Terbufos, water, fltrd, 0.7u GF ug/L (82675)	Tri-benuron, water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd, 0.7u GF ug/L (49235)	Tri-fluralin, water, fltrd, 0.7u GF ug/L (82661)	1,1,1,2-Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113, water, unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)
	08-05-04	<.010m	<.02	--u	<.07	<.009	<.03b	<.03b	<.16	<.04b	<.06b
	09-09-04	<.010m	<.02	--u	<.02	<.009	<.03b	<.03b	<.16	<.04b	<.06b
	Date	1,1-Di-chloro-ethane, water, unfltrd ug/L (34496)	1,1-Di-chloro-ethane, water, unfltrd ug/L (34501)	1,1-Di-chloro-propene, water, unfltrd ug/L (77168)	1,2,3,4 Tetra-methyl-benzene, water, unfltrd ug/L (49999)	1,2,3,5 Tetra-methyl-benzene, water, unfltrd ug/L (50000)	1,2,3-Tri-chloro-benzene, water, unfltrd ug/L (77613)	1,2,3-Tri-chloro-propane, water, unfltrd ug/L (77443)	1,2,3-Tri-methyl-benzene, water, unfltrd ug/L (77221)	1,2,4-Tri-chloro-benzene, water, unfltrd ug/L (34551)	1,2,4-Tri-methyl-benzene, water, unfltrd ug/L (77222)
	08-05-04	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b
	09-09-04	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b
	Date	Dibromo-chloro-propane, water, unfltrd ug/L (82625)	1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)	1,2-Di-chloro-benzene, water, unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-ethane-d4, sur Sch2090, wat unfltrd pct rcv (99832)	1,2-Di-chloro-propane, water, unfltrd ug/L (34541)	1,3,5-Tri-methyl-benzene, water, unfltrd ug/L (77226)	1,3-Di-chloro-benzene, water, unfltrd ug/L (34566)	1,3-Di-chloro-propane, water, unfltrd ug/L (77173)	1,4-Di-chloro-benzene, water, unfltrd ug/L (34571)
	08-05-04	<.5	<.04b	<.05b	<.1	121	<.03b	<.04b	<.03b	<.1b	<.03b
	09-09-04	<.5	<.04b	<.05b	<.1	113	<.03b	<.04b	<.03b	<.1b	E.05b
	Date	14Bromo-fluoro-benzene, surrog. VOC Sch, wat unfltrd pct rcv (99834)	2,2-Di-chloro-propane, water, unfltrd ug/L (77170)	2-Chloro-toluene, water, unfltrd ug/L (77275)	2-Ethyl-toluene, water, unfltrd ug/L (77220)	3-Chloro-propene, water, unfltrd ug/L (78109)	4-Chloro-toluene, water, unfltrd ug/L (77277)	4-Iso-propyl-toluene, water, unfltrd ug/L (77356)	Acetone, water, unfltrd ug/L (81552)	Acrylo-nitrile, water, unfltrd ug/L (34215)	Benzene, water, unfltrd ug/L (34030)
	08-05-04	95.2	<.05b	<.04b	<.06b	<.50m	<.05b	<.08b	<.6	<.1	<.02b
	09-09-04	92.0	<.05b	<.04b	<.06b	<.50m	<.05b	<.08b	<.6	<.1	<.02b

QUALITY OF GROUND WATER DATA
MONTGOMERY COUNTY, MARYLAND—Continued

Well Number	Date	Bromo-benzene water unfltrd ug/L (81555)	Bromo-chloro-methane water unfltrd ug/L (77297)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Bromo-ethene, water, unfltrd ug/L (50002)	Bromo-methane water unfltrd ug/L (34413)	Carbon di-sulfide water unfltrd ug/L (77041)	Chloro-benzene water unfltrd ug/L (34301)	Chloro-ethane, water, unfltrd ug/L (34311)	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)
POTOMAC RIVER NEARGREAT FALLS	08-05-04	<.03b	<.12	11.6	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b
	09-09-04	<.03b	<.12	11.9	<.1	<.3m	<.04b	<.03b	<.1	<.2m	<.02b
	Date	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-bromo-methane water unfltrd ug/L (30217)	Di-chloro-di-fluoro-methane wat unfltrd ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl methacrylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethyl-benzene water unfltrd ug/L (34371)
	08-05-04	<.05b	.9	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<.4.0	<.03b
	09-09-04	<.05b	1.9	<.05b	<.18m	<.1b	<.1b	<.10	<.2	<.4.0	<.03b
	Date	Hexa-chloro-buta-diene, water, unfltrd ug/L (39702)	Hexa-chloro-ethane, water, unfltrd ug/L (34396)	Iodo-methane water unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acrylate, water, unfltrd ug/L (49991)	Methyl methacrylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta+ para-Xylene, water, unfltrd ug/L (85795)
	08-05-04	<.1	<.1	<.35m	<.4b	<.04b	<.8	<.2.0	<.3	<.08b	<.06b
	09-09-04	<.1	<.1	<.35m	<.4b	<.04b	<.8	<.2.0	<.3	<.08b	<.06b
	Date	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)
	08-05-04	<.5	<.7b	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	.2	<.06b
	09-09-04	<.5	<.7b	<.1	<.04b	<.04b	<.06b	<.04b	<.05b	.3	<.06b
	Date	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unfltrd percent recovry (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unfltrd ug/L (73547)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)
	08-05-04	<.06b	E.09b	<.2	<.05b	95.2	<.03b	<.09b	<.7b	<.10	<.04b
	09-09-04	<.06b	E.09b	<.2	E.02t	99.0	<.03b	<.09b	<.7b	<.10b	<.04b

QUALITY OF GROUND WATER DATA
MONTGOMERY COUNTY, MARYLAND—Continued

Well Number	Date	Tri- chloro- fluoro- methane water unfiltrd ug/L (34488)	Tri- chloro- methane water unfiltrd ug/L (32106)	Vinyl chlor- ide, water, unfiltrd ug/L (39175)
POTOMAC RIVER				
NEAR GREAT FALLS	08-05-04	<.16	40.5d	<.1b
	09-09-04	<.16	22.8d	<.1b

Remark codes used in this table:

- < -- Less than
- E -- Estimated value

Value qualifier codes used in this table:

- b -- Value extrapolated at low end
- d -- Diluted sample: method hi range exceeded
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

Null value qualifier codes used in this table:

- u -- Unable to determine-matrix interference

QUALITY OF GROUND WATER DATA
PRINCE GEORGES COUNTY, MARYLAND

Well Number	Date	Time	Station number	Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
PG Be 37	10-21-03	1140	390157076454101	Environmental	217PPSC	GW	150	150	145
	10-21-03	1141		Replicate	217PPSC	GW	150	150	145
PG Be 38	10-16-03	1034	390248076492801	Blank	217PPSC	GW	126	--	--
	10-16-03	1035		Environmental	217PPSC	GW	126	126	119
	10-16-03	1037		Replicate	217PPSC	GW	126	126	119
PG Cc 31	10-15-03	1015	385723076593401	Blank	217PTXN	GW	41	--	--
	10-15-03	1415		Environmental	217PTXN	GW	41	41	21
	10-15-03	1416		Replicate	217PTXN	GW	41	41	21
PG De 21	03-04-04	1320	385130076465501	Environmental	211MGTY	GW	155	155	150
	03-04-04	1321		Replicate	211MGTY	GW	155	155	150

	Date	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 25 degC (00095)
PG Be 37	10-21-03	79.28	117	.85	220	4040	749	10.6	104	4.9	120
	10-21-03	--	117	--	220	4040	--	--	--	--	120
PG Be 38	10-16-03	--	250	--	--	4040	--	--	--	--	--
	10-16-03	66.55	250	.71	125	4040	758	8.2	82	5.0	30
	10-16-03	--	250	--	125	4040	--	--	--	--	--
PG Cc 31	10-15-03	--	93	--	--	4040	--	--	--	--	--
	10-15-03	21.90	93	.47	135	4040	749	7.2	77	5.6	476
	10-15-03	--	93	--	135	4040	--	--	--	--	--
PG De 21	03-04-04	65.10	95.8	.50	160	4040	765	<1.0	--	7.2	294
	03-04-04	--	95.8	.50	160	4040	--	--	--	--	--

	Date	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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)	ANC, wat unfltrd, incrm. field, mg/L as CaCO3 (00419)	Alkalinity, wat fltrd, inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat fltrd, incrm. field, mg/L (00453)
PG Be 37	10-21-03	24.0	13.8	16	4.01	1.52	1.38	14.6	--	2	2
	10-21-03	--	--	--	--	--	--	--	--	--	--
PG Be 38	10-16-03	--	--	--	--	--	--	--	--	--	--
	10-16-03	15.0	15.0	7	1.37	.814	.70	2.14	--	3	4
	10-16-03	--	--	--	--	--	--	--	--	--	--
PG Cc 31	10-15-03	--	--	--	.01	<.008	<.16	.20	--	--	--
	10-15-03	16.5	17.5	180	52.9	11.6	6.25	16.3	--	20	25
	10-15-03	--	--	--	--	--	--	--	--	--	--
PG De 21	03-04-04	16.0	13.7	120	43.5	3.31	3.22	2.53	133	--	--
	03-04-04	--	--	--	--	--	--	--	--	--	--

Geologic Unit (aquifer): 217PPSC - Patapsco Formation
217PTXN - Patuxent Formation
211MGTY - Magothy Formation

Station Type: GW - Ground Water

Sampling Method: 4040 - Submersible pump

PRINCE GEORGES COUNTY, MARYLAND—Continued

Well Number	Date	Rn-222, water, unfltrd pCi/L (82303)	Uranium natural water, fltrd, ug/L (22703)
PG Be 37	10-21-03	300	E.04n
	10-21-03	--	E.04n
PG Be 38	10-16-03	--	--
	10-16-03	190	<.04
	10-16-03	--	--
PG Cc 31	10-15-03	--	<.04
	10-15-03	510	.07
	10-15-03	--	--
PG De 21	03-04-04	130	<.04
	03-04-04	--	--

Remark codes used in this table:

- < -- Less than
- E -- Estimated value
- M-- Presence verified, not quantified

Value qualifier codes used in this table:

- b -- Value extrapolated at low end
- d -- Diluted sample: method hi range exceeded
- k -- Counts outside acceptable range
- m-- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

QUALITY OF GROUND WATER DATA
 QUEEN ANNES COUNTY, MARYLAND

Well Number	Date	Time	Sample type	Geologic unit	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
QA Cg 67	12-11-03 <i>12-11-03</i>	1200 <i>1205</i>	Environmental	112CLMB <i>112CLMB</i>	82420 --	80020 <i>80020</i>	33 --	33 <i>33</i>	33 --	27 --
QA Db 14	04-05-04	1330	Environmental	125AQUI	82420	80020	--	165	165	145
QA Db 15	08-24-04	1100	Environmental	125AQUI	82420	80020	--	165	165	145
	04-06-04	0940	Environmental	125AQUI	82420	80020	--	103	103	96
QA Db 17	08-24-04	1450	Environmental	125AQUI	82420	80020	--	103	103	96
	04-05-04	1430	Environmental	125AQUI	82420	80020	--	--	--	--
QA Db 23	08-24-04	1325	Environmental	125AQUI	82420	80020	--	--	--	--
	04-05-04	1300	Environmental	125AQUI	82420	80020	--	185	185	165
QA Db 27	08-25-04	0907	Environmental	125AQUI	82420	80020	--	185	185	165
	04-01-04	1600	Environmental	125AQUI	82420	80020	--	145	145	110
QA Db 30	08-24-04	1000	Environmental	125AQUI	82420	80020	--	145	145	110
	09-01-04	1300	Environmental	125AQUI	82420	80020	--	220	220	210
QA Db 32	09-01-04	1200	Environmental	125AQUI	82420	80020	--	116	116	106
QA Db 34	09-02-04	1000	Environmental	125AQUI	82420	80020	--	180	180	170
QA Db 35	09-02-04	1400	Environmental	125AQUI	82420	80020	--	200	200	190
	<i>09-02-04</i>	<i>1405</i>	<i>Replicate</i>	<i>125AQUI</i>	--	<i>80020</i>	--	<i>200</i>	--	--
QA Db 37	09-02-04	1100	Environmental	125AQUI	82420	80020	--	250	250	240
QA Ea 39	04-06-04	1050	Environmental	125AQUI	82420	80020	--	95	95	80
	08-25-04	1045	Environmental	125AQUI	82420	80020	--	95	95	80
QA Ea 42	04-05-04	1100	Environmental	125AQUI	82420	80020	--	120	120	100
	08-25-04	1235	Environmental	125AQUI	82420	80020	--	120	120	100
QA Ea 45	08-25-04	1507	Environmental	125AQUI	82420	80020	--	210	210	200
QA Ea 48	04-05-04	1200	Environmental	125AQUI	82420	80020	--	160	160	129
	08-24-04	1610	Environmental	125AQUI	82420	80020	--	160	160	129
QA Ea 59	04-07-04	1110	Environmental	125AQUI	82420	80020	--	215	215	195
	08-25-04	1400	Environmental	125AQUI	82420	80020	--	215	215	195
	09-30-04	1100	Environmental	125AQUI	82420	80020	--	215	215	195
QA Ea 60	04-06-04	1240	Environmental	125AQUI	82420	80020	--	185	185	165
	08-26-04	1205	Environmental	125AQUI	82420	80020	--	185	185	165
QA Ea 61	04-06-04	1135	Environmental	125AQUI	82420	80020	--	170	170	150
	08-26-04	1040	Environmental	125AQUI	82420	80020	--	170	170	150
QA Ea 77	08-30-04	1200	Environmental	125AQUI	82420	80020	--	205	205	195
QA Ea 78	08-30-04	1210	Environmental	125AQUI	82420	80020	--	135	135	125
QA Ea 79	08-31-04	1200	Environmental	125AQUI	82420	80020	--	298	298	288
QA Ea 80	08-31-04	1300	Environmental	125AQUI	82420	80020	--	130	130	120
	<i>08-31-04</i>	<i>1305</i>	<i>Replicate</i>	<i>125AQUI</i>	--	<i>80020</i>	--	<i>130</i>	--	--
QA Ea 81	08-30-04	1215	Environmental	125AQUI	82420	80020	--	310	310	300
QA Ea 82	08-26-04	1255	Environmental	125AQUI	82420	80020	--	170	170	155
QA Eb 144	04-06-04	1445	Environmental	125AQUI	82420	80020	--	240	240	220
QA Eb 156	08-26-04	1310	Environmental	125AQUI	82420	80020	--	240	240	220
	09-02-04	1200	Environmental	125AQUI	82420	80020	--	220	220	210
QA Eb 157	09-02-04	1300	Environmental	125AQUI	82420	80020	--	120	120	110
QA Fa 49	04-07-04	1020	Environmental	125AQUI	82420	80020	--	210	210	185
	09-21-04	1300	Environmental	125AQUI	82420	80020	--	210	210	185
QA Fa 54	04-01-04	1345	Environmental	125AQUI	82420	80020	--	260	260	240
	08-26-04	1520	Environmental	125AQUI	82420	80020	--	260	260	240
QA Fa 58	08-27-04	1015	Environmental	125AQUI	82420	80020	--	280	280	260
QA Fa 60	08-27-04	1315	Environmental	125AQUI	82420	80020	--	240	240	230
	09-21-04	1000	Environmental	125AQUI	82420	80020	--	240	240	230
QA Fa 63	04-06-04	1335	Environmental	125AQUI	82420	80020	--	235	235	200
QA Fa 64	04-01-04	1430	Environmental	125AQUI	82420	80020	--	231	231	191
QA Fa 66	09-21-04	1400	Environmental	125AQUI	82420	80020	--	231	231	191
	04-07-04	0930	Environmental	125AQUI	82420	80020	--	270	270	250
	08-27-04	1455	Environmental	125AQUI	82420	80020	--	270	270	250

Geologic Unit (aquifer): 125AQUI - Aquia Formation
 112CLMB - Columbia Formation

Agency collecting sample: 82420 - Maryland Geological Survey

Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, Co

QUALITY OF GROUND WATER DATA

QUEEN ANNES COUNTY, MARYLAND—Continued

Well Number	Date	Depth to water level, feet below LSD (72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	Carbon dioxide water, unfltrd mg/L (00405)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
QA Cg 67	12-11-03	--	3.6	35	8030	168	4.9	201	13.9	27	5.63
	12-11-03	--	--	--	--	--	--	--	--	--	<i>E.009n</i>
QA Db 14	04-05-04	--	E3	--	8030	--	7.2	462	14.3	--	--
	08-24-04	--	4	17	8030	--	7.2	459	15.5	--	--
QA Db 15	04-06-04	--	--	--	8030	--	6.9	1,100	13.2	--	--
	08-24-04	--	6	36	8030	--	--	1,080	17.6	--	--
QA Db 17	04-05-04	--	3	--	8030	--	7.1	--	13.6	--	--
	08-24-04	--	4	40	8030	--	6.9	743	17.1	--	--
QA Db 23	04-05-04	--	E3	--	8030	--	7.0	--	13.9	--	--
	08-25-04	--	--	--	8030	--	--	--	--	--	--
QA Db 27	04-01-04	--	E3	--	8030	--	7.1	1,230	14.4	--	--
	08-24-04	--	3	47	8030	--	6.9	1,270	15.2	--	--
QA Db 30	09-01-04	16.90	6.7	55	4040	--	6.4	17,000	16.8	--	--
QA Db 32	09-01-04	16.41	6	65	4040	--	6.6	7,760	16.0	--	--
QA Db 34	09-02-04	8.49	30	30	4030	--	7.2	522	15.5	--	--
QA Db 35	09-02-04	6.00	6.3	60	4040	--	--	16,800	16.1	--	--
	09-02-04	--	--	--	--	--	--	--	--	--	--
QA Db 37	09-02-04	8.28	6.3	60	4040	--	--	569	17.1	--	--
QA Ea 39	04-06-04	--	--	--	8030	--	7.4	426	14.6	--	--
	08-25-04	--	4	24	8030	--	--	--	15.2	--	--
QA Ea 42	04-05-04	--	E3	--	8030	--	7.5	599	14.6	--	--
	08-25-04	--	2.4	30	8030	--	--	747	16.5	--	--
QA Ea 45	08-25-04	--	1.3	22	8030	--	--	--	16.6	--	--
QA Ea 48	04-05-04	--	E4	--	8030	--	7.3	1,510	15.0	--	--
	08-24-04	--	6	25	8030	--	7.3	1,540	16.7	--	--
QA Ea 59	04-07-04	--	--	--	8030	--	7.7	599	15.3	--	--
	08-25-04	--	2.4	30	8030	--	--	549	17.0	--	--
	09-30-04	--	4.0	19	8030	--	7.7	587	16.2	--	--
QA Ea 60	04-06-04	--	--	--	8030	--	7.5	1,870	15.0	--	--
	08-26-04	--	3.4	20	8030	--	7.7	1,890	16.4	--	--
QA Ea 61	04-06-04	--	--	--	8030	--	--	5,510	14.6	--	--
	08-26-04	--	4	25	8030	--	7.0	5,610	15.6	--	--
QA Ea 77	08-30-04	13.09	5.4	60	4040	--	--	16,500	17.2	--	--
QA Ea 78	08-30-04	13.28	12	45	4030	--	--	329	16.0	--	--
QA Ea 79	08-31-04	11.61	4	95	4040	--	9.1	354	18.1	--	--
QA Ea 80	08-31-04	11.61	24.0	50	4030	--	7.7	355	15.2	--	--
	08-31-04	--	--	--	--	--	--	--	--	--	--
QA Ea 81	08-30-04	12.74	--	105	4040	--	--	499	18.4	--	--
QA Ea 82	08-26-04	--	4	30	8030	--	7.8	1,150	16.8	--	--
QA Eb 144	04-06-04	--	--	--	8030	--	7.6	426	15.5	--	--
	08-26-04	--	4	25	8030	--	--	419	16	--	--
QA Eb 156	09-02-04	14.87	9.2	45	4030	--	--	--	15.9	--	--
QA Eb 157	09-02-04	13.18	60.0	25	4030	--	7.2	335	14.9	--	--
QA Fa 49	04-07-04	--	--	--	8030	--	7.8	1,000	16.5	--	--
	09-21-04	--	3.9	20	8030	--	7.5	1,000	17.7	--	--
QA Fa 54	04-01-04	--	E2.0	--	8030	--	7.8	340	15.4	--	--
	08-26-04	--	4.0	30	8030	--	--	354	17.1	--	--
QA Fa 58	08-27-04	--	E4	25	8030	--	--	466	16.6	--	--
QA Fa 60	08-27-04	--	1.7	20	8030	--	--	459	19.1	--	--
	09-21-04	--	--	--	8030	--	8.2	437	--	--	--
QA Fa 63	04-06-04	--	--	--	8030	--	--	466	15.5	--	--
QA Fa 64	04-01-04	--	E4	--	8030	--	7.6	1,190	14.8	--	--
	09-21-04	--	7.1	20	8030	--	7.6	1,240	16.4	--	--
QA Fa 66	04-07-04	--	--	--	8030	--	7.7	517	15.2	--	--
	08-27-04	--	3.4	25	8030	--	--	515	17.5	--	--

Sampling Method: 8030 - Grab sample at water-supply tap
 4040 - Submersible pump
 4030 - Suction pump

QUALITY OF GROUND WATER DATA
 QUEEN ANNES COUNTY, MARYLAND—Continued

Well Number	Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	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 flt mg/L (70300)
QA Cg 67	12-11-03	3.23	2.4	24.7	6	7	23.5	<.17	21.1	10.8	124
	<i>12-11-03</i>	<i><.008</i>	<i><.16</i>	<i><.10</i>	--	--	<i><.20</i>	<i><.17</i>	<i><.20</i>	<i><.18</i>	<i><.10</i>
QA Db 14	04-05-04	--	--	--	--	--	14.9	--	--	--	--
	08-24-04	--	--	--	--	--	14.5	--	--	--	--
QA Db 15	04-06-04	--	--	--	--	--	132	--	--	--	--
	08-24-04	--	--	--	--	--	129	--	--	--	--
QA Db 17	04-05-04	--	--	--	--	--	97.8	--	--	--	--
	08-24-04	--	--	--	--	--	101	--	--	--	--
QA Db 23	04-05-04	--	--	--	--	--	16.6	--	--	--	--
	08-25-04	--	--	--	--	--	15.7	--	--	--	--
QA Db 27	04-01-04	--	--	--	--	--	253	--	--	--	--
	08-24-04	--	--	--	--	--	227	--	--	--	--
QA Db 30	09-01-04	--	--	--	--	--	5970d	--	--	--	--
QA Db 32	09-01-04	--	--	--	--	--	2400d	--	--	--	--
QA Db 34	09-02-04	--	--	--	--	--	8.97	--	--	--	--
QA Db 35	09-02-04	--	--	--	--	--	6250d	--	--	--	--
	<i>09-02-04</i>	--	--	--	--	--	<i>6210d</i>	--	--	--	--
QA Db 37	09-02-04	--	--	--	--	--	11.6	--	--	--	--
QA Ea 39	04-06-04	--	--	--	--	--	33	--	--	--	--
	08-25-04	--	--	--	--	--	33.3	--	--	--	--
QA Ea 42	04-05-04	--	--	--	--	--	80.8	--	--	--	--
	08-25-04	--	--	--	--	--	130	--	--	--	--
QA Ea 45	08-25-04	--	--	--	--	--	9.04	--	--	--	--
QA Ea 48	04-05-04	--	--	--	--	--	373d	--	--	--	--
	08-24-04	--	--	--	--	--	376d	--	--	--	--
QA Ea 59	04-07-04	--	--	--	--	--	88.5	--	--	--	--
	08-25-04	--	--	--	--	--	74.8	--	--	--	--
	09-30-04	--	--	--	--	--	86.8	--	--	--	--
QA Ea 60	04-06-04	--	--	--	--	--	509d	--	--	--	--
	08-26-04	--	--	--	--	--	508d	--	--	--	--
QA Ea 61	04-06-04	--	--	--	--	--	1700d	--	--	--	--
	08-26-04	--	--	--	--	--	1770d	--	--	--	--
QA Ea 77	08-30-04	--	--	--	--	--	6000d	--	--	--	--
QA Ea 78	08-30-04	--	--	--	--	--	4.11	--	--	--	--
QA Ea 79	08-31-04	--	--	--	--	--	1.52	--	--	--	--
QA Ea 80	08-31-04	--	--	--	--	--	2.08	--	--	--	--
	<i>08-31-04</i>	--	--	--	--	--	<i>2.1</i>	--	--	--	--
QA Ea 81	08-30-04	--	--	--	--	--	38.4	--	--	--	--
QA Ea 82	08-26-04	--	--	--	--	--	273	--	--	--	--
QA Eb 144	04-06-04	--	--	--	--	--	5.65	--	--	--	--
	08-26-04	--	--	--	--	--	4.52	--	--	--	--
QA Eb 156	09-02-04	--	--	--	--	--	8050d	--	--	--	--
QA Eb 157	09-02-04	--	--	--	--	--	4.02	--	--	--	--
QA Fa 49	04-07-04	--	--	--	--	--	172	--	--	--	--
	09-21-04	--	--	--	--	--	186	--	--	--	--
QA Fa 54	04-01-04	--	--	--	--	--	11.6	--	--	--	--
	08-26-04	--	--	--	--	--	10.8	--	--	--	--
QA Fa 58	08-27-04	--	--	--	--	--	8.88	--	--	--	--
QA Fa 60	08-27-04	--	--	--	--	--	11.0	--	--	--	--
	09-21-04	--	--	--	--	--	14.0	--	--	--	--
QA Fa 63	04-06-04	--	--	--	--	--	10.4	--	--	--	--
QA Fa 64	04-01-04	--	--	--	--	--	289	--	--	--	--
	09-21-04	--	--	--	--	--	292	--	--	--	--
QA Fa 66	04-07-04	--	--	--	--	--	20.8	--	--	--	--
	08-27-04	--	--	--	--	--	20.3	--	--	--	--

QUALITY OF GROUND WATER DATA

QUEEN ANNES COUNTY, MARYLAND—Continued

Well Number	Date	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unfltrd percent recovry (99833)	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)
QA Cg 67	12-11-03	<.1	98.24	21	200
	12-11-03	<.1	94.52	--	--
QA Db 14	04-05-04	--	--	--	--
	08-24-04	--	--	--	--
QA Db 15	04-06-04	--	--	--	--
	08-24-04	--	--	--	--
QA Db 17	04-05-04	--	--	--	--
	08-24-04	--	--	--	--
QA Db 23	04-05-04	--	--	--	--
	08-25-04	--	--	--	--
QA Db 27	04-01-04	--	--	--	--
	08-24-04	--	--	--	--
QA Db 30	09-01-04	--	--	--	--
QA Db 32	09-01-04	--	--	--	--
QA Db 34	09-02-04	--	--	--	--
QA Db 35	09-02-04	--	--	--	--
	09-02-04	--	--	--	--
QA Db 37	09-02-04	--	--	--	--
QA Ea 39	04-06-04	--	--	--	--
	08-25-04	--	--	--	--
QA Ea 42	04-05-04	--	--	--	--
	08-25-04	--	--	--	--
QA Ea 45	08-25-04	--	--	--	--
QA Ea 48	04-05-04	--	--	--	--
	08-24-04	--	--	--	--
QA Ea 59	04-07-04	--	--	--	--
	08-25-04	--	--	--	--
	09-30-04	--	--	--	--
QA Ea 60	04-06-04	--	--	--	--
	08-26-04	--	--	--	--
QA Ea 61	04-06-04	--	--	--	--
	08-26-04	--	--	--	--
QA Ea 77	08-30-04	--	--	--	--
QA Ea 78	08-30-04	--	--	--	--
QA Ea 79	08-31-04	--	--	--	--
QA Ea 80	08-31-04	--	--	--	--
	08-31-04	--	--	--	--
QA Ea 81	08-30-04	--	--	--	--
QA Ea 82	08-26-04	--	--	--	--
QA Eb 144	04-06-04	--	--	--	--
	08-26-04	--	--	--	--
QA Eb 156	09-02-04	--	--	--	--
QA Eb 157	09-02-04	--	--	--	--
QA Fa 49	04-07-04	--	--	--	--
	09-21-04	--	--	--	--
QA Fa 54	04-01-04	--	--	--	--
	08-26-04	--	--	--	--
QA Fa 58	08-27-04	--	--	--	--
QA Fa 60	08-27-04	--	--	--	--
	09-21-04	--	--	--	--
QA Fa 63	04-06-04	--	--	--	--
QA Fa 64	04-01-04	--	--	--	--
	09-21-04	--	--	--	--
QA Fa 66	04-07-04	--	--	--	--
	08-27-04	--	--	--	--

QUALITY OF GROUND WATER DATA
 QUEEN ANNES COUNTY, MARYLAND—Continued

Well Number	Date	Time	Sample type	Geologic unit	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Flow rate, instantaneous gal/min (00059)
QA Fa 67	04-01-04	1300	Environmental	125AQUI	82420	80020	270	270	250	2.0
	09-21-04	1200	Environmental	125AQUI	82420	80020	270	270	250	4.0
QA Fa 72	09-21-04	1030	Environmental	125AQUI	82420	80020	220	220	200	5.0
QA Fa 75	04-01-04	1230	Environmental	125AQUI	82420	80020	200	200	180	--
	09-21-04	1115	Environmental	125AQUI	82420	80020	200	200	180	5.0

Well Number	Date	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Chloride, water, fltrd, mg/L (00940)
QA Fa 67	04-01-04	--	8030	7.7	336	14.5	11.5
	09-21-04	23	8030	7.6	349	16.2	10.8
QA Fa 72	09-21-04	20	8030	7.9	493	16.1	14.4
QA Fa 75	04-01-04	--	8030	8.0	490	--	21.4
	09-21-04	25	8030	7.8	521	20.0	21.2

Remark codes used in this table:

< -- Less than
 E -- Estimated value

Value qualifier codes used in this table:

d -- Diluted sample: method hi range exceeded
 n -- Below the LRL and above the LT-MDL

Geologic Unit (aquifer): 125AQUI - Aquia Formation

Agency collecting sample: 82420 - Maryland Geological Survey

Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, Co

QUALITY OF GROUND WATER DATA

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WORCESTER COUNTY, MARYLAND

Well Number	Date	Time	Station number	Sample type	Geologic unit	Station type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
WO Ah 36	09-10-04	1030	382635075030602	Environmental	122MNKN	GW	430	440	430
	09-10-04	1035		Replicate	122MNKN	GW	430	--	--
WO Ah 38	09-08-04	1000	382638075033001	Environmental	122MNKN	GW	430	430	330
WO Bh 34	09-09-04	0930	382443075033501	Environmental	122MNKN	GW	353	353	337
WO Bh 84	09-07-04	1230	382215075041901	Environmental	121BVDM	GW	89	89	84
WO Bh 85	09-07-04	1330	382215075041902	Environmental	122PCMK	GW	195	195	191
WO Bh 89	09-07-04	1130	382215075041903	Environmental	122MNKN	GW	510	510	388
WO Bh 98	09-09-04	1130	382127075043802	Environmental	122OCNC	GW	310	275	255
WO Bh 101	09-08-04	1030	382127075043804	Environmental	122OCNC	GW	312	307	237
	09-08-04	1035		Replicate	122OCNC	GW	312	--	--
WO Cg 33	09-08-04	1130	381938075052001	Environmental	112RDGV	GW	290	290	253
WO Cg 87	09-08-04	1100	381953075051401	Environmental	122OCNC	GW	312	307	246

	Date	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered uS/cm 25 degC (00095)
WO Ah 36	09-10-04	29.00	14.32	10.0	60	4040	773	.2	2	6.5	782
	09-10-04	--	14.32	--	--	--	--	--	--	--	--
WO Ah 38	09-08-04	--	4	--	--	8010	768	--	--	6.2	543
WO Bh 34	09-09-04	13.74	4	10.0	60	4040	765	<.1	--	6.7	251
WO Bh 84	09-07-04	45.00	5	7.5	25	4040	758	.1	1	6.8	412
WO Bh 85	09-07-04	5.70	5	9.0	50	4040	758	M	--	6.8	423
WO Bh 89	09-07-04	18.53	5.59	6.0	110	4040	758	.1	1	7.0	2,010
WO Bh 98	09-09-04	35.86	5	10.0	90	4040	765	<.1	--	7.3	451
WO Bh 101	09-08-04	--	5	--	--	4045	768	--	--	7.6	426
	09-08-04	--	5	--	--	--	--	--	--	--	--
WO Cg 33	09-08-04	--	6.00	--	--	4045	768	--	--	7.3	440
WO Cg 87	09-08-04	--	10	--	--	4045	768	--	--	7.3	478

Geologic Unit (aquifer): 122MNKN - Manokin aquifer
 121BVDM - Beaverdam Sand
 122PCMK - Pocomoke aquifer
 122OCNC - Ocean City aquifer
 112RDGV - Red Gravelly Facies

Station Type: GW - Ground Water

Sampling Method: 4040 - Submersible pump
 4045 - Submersible multiple impeller pump
 8010 - Other

QUALITY OF GROUND WATER DATA
WORCESTER COUNTY, MARYLAND—Continued

Well Number	Date	Temperature, water, deg C (00010)	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)	Bromide, water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
WO Ah 36	09-10-04	17.5	90	24.5d	6.88d	5.62d	112d	.45d	154	<.2	34.6d
	09-10-04	--	86	23.8	6.44	5.28	101	.47d	156	<.2	35.3
WO Ah 38	09-08-04	18.0	74	21.3	5.10	4.25	61.4	.36	98.6	<.2	36.8
WO Bh 34	09-09-04	18.0	58	14.1	5.62	4.54	11.1	.04	15.2	<.2	38.5
WO Bh 84	09-07-04	17.5	94	19.2	11.1	10.7	30.3	.25	54.1	<.2	38.4
WO Bh 85	09-07-04	17.5	95	15.6	13.6	10.9	36.0	.23	48.1	.2	35.6
WO Bh 89	09-07-04	18.0	270	29.8	47.9	17.6	286	1.77d	501d	.2	35.8
WO Bh 98	09-09-04	17.5	160	39.2	16.1	10.8	19.6	.09	26.8	<.2	30.7
WO Bh 101	09-08-04	17.0	150	36.9	13.6	9.89	23.0	.07	24.6	.2	30.5
	09-08-04	--	150	37.5	13.6	10.0	23.4	.02	24.7	<.2	30.4
WO Cg 33	09-08-04	17.0	130	33.5	10.8	8.09	32.9	.09	31.1	.2	26.4
WO Cg 87	09-08-04	17.0	120	30.8	10.5	8.71	41.8	.20	51.4	<.2	29.9

Well Number	Date	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
WO Ah 36	09-10-04	<.2	439	13500d	131d
	09-10-04	<.2	425	13600d	123
WO Ah 38	09-08-04	E.1n	297	12500d	123
WO Bh 34	09-09-04	<.2	164	19100d	126
WO Bh 84	09-07-04	<.2	240	6,200	87.2
WO Bh 85	09-07-04	<.2	249	5,030	108
WO Bh 89	09-07-04	1.7d	1,080	7850c	144
WO Bh 98	09-09-04	E.1n	270	1,350	26.7
WO Bh 101	09-08-04	<.2	253	539	42.4
	09-08-04	<.2	255	480	43.3
WO Cg 33	09-08-04	<.2	265	1,910	65.8
WO Cg 87	09-08-04	<.2	277	1,900	54.1

Remark codes used in this table:

< -- Less than

E -- Estimated value

M-- Presence verified, not quantified

Value qualifier codes used in this table:

d -- Diluted sample: method hi range exceeded

n -- Below the LRL and above the LT-MDL

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Conversion Factors

Multiply	By	To obtain
Length		
inch (in.)	2.54×10^1	millimeter (mm)
	2.54×10^{-2}	meter (m)
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^0	kilometer (km)
Area		
acre	4.047×10^3	square meter (m ²)
	4.047×10^{-1}	square hectometer (hm ²)
	4.047×10^{-3}	square kilometer (km ²)
square mile (mi ²)	2.590×10^0	square kilometer (km ²)
Volume		
gallon (gal)	3.785×10^0	liter (L)
	3.785×10^{-3}	cubic meter (m ³)
	3.785×10^0	cubic decimeter (dm ³)
million gallons (Mgal)	3.785×10^3	cubic meter (m ³)
	3.785×10^{-3}	cubic hectometer (hm ³)
cubic foot (ft ³)	2.832×10^{-2}	cubic meter (m ³)
	2.832×10^1	cubic decimeter (dm ³)
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter (m ³)
	2.447×10^{-3}	cubic hectometer (hm ³)
acre-foot (acre-ft)	1.233×10^3	cubic meter (m ³)
	1.233×10^{-3}	cubic hectometer (hm ³)
	1.233×10^{-6}	cubic kilometer (km ³)
Flow		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second (L/s)
	2.832×10^{-2}	cubic meter per second (m ³ /s)
	2.832×10^1	cubic decimeter per second (dm ³ /s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m ³ /s)
	6.309×10^{-2}	cubic decimeter per second (dm ³ /s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second (m ³ /s)
	4.381×10^1	cubic decimeter per second (dm ³ /s)
Mass		
ton (short)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$$

